

THE UNIVERSITY OF LIVERPOOL

# Positive psychological factors in late adolescence

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The role of resilience and hope in the well-being  
of 16 to 18 year olds

Vicky Charles

Supervisors:

Dr James Reilly

Dr Jayne Merrin

Dr Bill Sellwood

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### POSITIVE PSYCHOLOGICAL FACTORS IN LATE ADOLESCENCE

The traditional view of adolescence and stress' (Hall, 1904, cited in Savage, 2007) in which a number of social and psychological changes take place. Recently, there has been a shift in research relating to adolescence from a deficit-based model, which focuses on the difficulties experienced within this developmental stage, to a strengths-based model (Coleman, 2011). Coleman and Hagell (2007) state that a new perspective on adolescence is developing as a result of the accumulating evidence base whereby the emphasis is on adaptation rather than disorder. Thus, "A central question which faces researchers in this field has to do, not with how many young people face difficulties in adjustment, but with the process of successful adaptation

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## **Abstract**

**Background:** Adolescence is a time of significant psychological readjustment. A number of young people experience the transition to adulthood as challenging, however many are able to adapt without significant difficulties and thus demonstrate resilience.

**Aim:** The aim of this study was to investigate the role of hope and resilience in relation to well-being in late adolescence in a sample of young people aged between 16 and 18 years.

**Method:** A cross-sectional questionnaire design was utilised with a sample of 50 participants aged between 16 and 18 years of age and who were recruited from a college. Participants completed three measures relating to well-being, resilience, and hope.

**Findings:** The results support the hypotheses that hope and resilience are related to well-being. High levels of hope are associated with high levels of well-being and hope is a significant predictor of well-being in young people aged between 16 and 18 years.

**Implications:** Young people may benefit from accessing services that enhance their levels of hope and resilience and emphasise their existing strengths and resources in relation to negotiating the transition to adulthood.



## Contents

Acknowledgements	i
Abstract	ii
Contents	iii
List of figures	vi
List of tables	vii
List of appendices	viii
<b>1. Introduction</b>	<b>1</b>
1.1 Literature search	3
1.2 Theories of adolescence	4
1.2.1 Biological development	5
1.2.2 Cognitive development	5
1.2.3 Psychosocial development	6
1.2.3.1 Emerging Adulthood	8
1.2.4 Psychological development	9
1.2.4.1 The mental health of young people	11
1.2.4.2 Mental Health services for Children and Adolescents	14
1.3 The science of positive psychology (Seligman, 2002)	15
1.3.1 The Well-being Theory (Seligman, 2011)	16
1.3.2 The well-being agenda in the UK	18
1.3.2.1 The well-being of young people	19
1.4 The concept of resilience	20
1.5 Theories of hope	23
1.5.1 Scioli's (2007) Theory of Hope	25
1.6 Rationale of the current research	27
1.7 Aims of the current research	28
1.8 Hypotheses	29

<b>2. Method</b>	<b>30</b>
2.1 Ethical approval	30
2.2 Design	31
2.3 Participants	31
2.4 Sample characteristics	32
2.5 Pilot study with college students	32
2.6 Method of current study	34
2.6.1 Research measures	34
2.6.1.1 Demographic Information Sheet	34
2.6.1.2 Resiliency Scales for Children and Adolescents (RSCA)	
(Prince-Embury, 2007)	35
2.6.1.3 Clinical Outcomes in Routine Evaluation Outcome Measure	
(CORE-OM)	36
2.6.1.4 Comprehensive Hope Scale-Trait Version	
(CHS-T) (Scioli, 2010)	38
2.6.2 Procedure	40
2.6.2.1 Recruitment from college	40
2.6.2.2 Administration of research measures	40
2.6.2.3 Prize draw	41
2.7 Response rates	42
2.8 Missing data	42
2.8.1 The Comprehensive Hope Scale	42
2.9 Data screening	43
2.9.1 Outliers and residuals	43
<b>3. Results</b>	<b>45</b>
3.1 Demographic characteristics	45
3.2 Means and standard deviations	46

3.3 Analysis of the data	47
3.3.1 Pearson's correlations	47
3.3.2 Well-being and hope	50
3.3.3 Well-being and resilience	50
3.3.4 Hope and resilience	51
3.4 Multiple Regression	52
3.4.1 Hope as a predictor of well-being	53
3.4.2 Secondary analysis	56
3.4.3 Assessing multicollinearity	56
<b>4. Discussion</b>	<b>58</b>
4.1 Summary of the findings	59
4.1.1 Summary of the findings in relation to the literature review	60
4.1.2 Hope and well-being	60
4.1.3 Well-being and resilience	62
4.1.4 Hope and resilience	63
4.2 Strengths and limitations of the current study	64
4.2.1 Methodological considerations	64
4.2.2 Design	64
4.2.2.1 Selection of measures	68
4.2.2.2 Sample size	69
4.2.2.3 Removal of CAMHS data	70
4.2.2.4 Missing data	71
4.2.2.5 Strengths of the current study	72
4.3 Clinical implications	73
4.4 Directions for future research	76
4.5 Conclusion	79
<b>5. References</b>	<b>82</b>

### **List of figures**

**Figures 1-4:** Scatterplots to show the relationship between each variable Appendix XI

**Figures 5-9:** Histograms to show normal distribution of the data Appendix XII

### List of tables

<b>Table 1:</b> Demographic information regarding the sample	45
<b>Table 2:</b> Demographic information regarding contact with mental health services	46
<b>Table 3:</b> The Mean, Standard Deviation, and Range of the mean total scores for each measure	47
<b>Table 4:</b> Correlation Matrix of the relationships between all of the variables	49
<b>Table 5:</b> Hope and Reactivity as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression	54
<b>Table 6:</b> Hope and Mastery as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression	54
<b>Table 7:</b> Hope and Relatedness as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression	55
<b>Table 8:</b> Skewness and kurtosis, converted to Z-scores	Appendix XIII

### **List of appendices**

Appendix I	Letter of approval from the Division of Clinical Psychology
Appendix II	Letter of ethical approval from NREC and R and D
Appendix III	Confirmation of approval to recruit from college
Appendix IV	Participant information Sheet
Appendix V	Research measures
Appendix VI	Information sheet regarding available services
Appendix VII	Poster to advertise study designed by college students
Appendix VIII	Letter of NREC ethical approval regarding amendment
Appendix IX	Consent form
Appendix X	Prize draw consent sheet
Appendix XI	Figures 1-4: Scatterplots
Appendix XII	Figures 5-9: Histograms
Appendix XIII	Table 8: Skewness and kurtosis
Appendix XIV	Protocol for recruitment from clinical service

## **1.0 Introduction**

The traditional view of adolescence is that it is a time of 'storm and stress' (Hall, 1904, cited in Savage, 2007) in which a number of biological, cognitive, social and psychological changes take place. Recently, there has been a shift in research relating to adolescence from a deficit-based model, which focuses on the difficulties experienced within this developmental stage, to a strengths-based model (Coleman, 2011). Coleman and Hagell (2007) state that a new perspective on adolescence is developing as a result of the accumulating evidence base whereby the emphasis is on adaptation rather than disorder. Thus, "A central question which faces researchers in this field has to do, not with how many young people face difficulties in adjustment, but with the process of successful adaptation and coping." (Coleman, 2011, p 17).

Seligman and Csikszentmihalyi (2000) introduced the field of positive psychology, a strengths-based approach that is complementary to the traditional psychological-deficit model of clinical psychology. This approach purports that well-being can be improved by enhancing existing psychological strengths, such as hope and resilience (Seligman, 2002). Positive psychology aims to identify the strengths and resources demonstrated by resilient young people, and to understand how these characteristics enable them to successfully emerge into adulthood despite adversity (Carr, 2011).

Resilience is defined as "the manifestation of positive adaptation despite significant life adversity" (Luthar, 2003, p xxix) and thus is a concept relevant to strength-based models of adolescence. Research regarding resilience in adolescence has focused on risk and protective factors for the development of mental health problems and other undesirable

outcomes (Masten & Tellegen, 2012; Rutter, 1985). Hope may constitute a protective factor as hopeful people are more likely to develop effective coping strategies when faced with adversity (Compton & Hoffman, 2012). Scioli (2007) proposes a multi-dimensional theory of hope that incorporates facets of positive psychology and resilience. These include psychological and social resources in relation to attachment, mastery and survival and which facilitates the assessment of well-being. Thus Scioli's (2007) theory of hope is applicable to the developmental experiences of adolescence.

Adolescence is a difficult concept to define (Hendry & Kloep, 2012) and Bentall (2003) proposes that it is the least understood stage of development. There are differing views as to when it begins and ends (Bentall, 2003), for example, Erikson (1968) suggested that adolescence occurs between the ages of 12 and 18 years whereas more recent evidence indicates that adolescence begins earlier and continues beyond 21 years (Coleman, 2011). The United Nations General Assembly defines 'adolescence' as occurring between the ages of ten and 19 years, and uses the term 'young people' to describe those aged between ten and 24 years (UNICEF, 2011). These terms will be used throughout this thesis to reflect the age ranges specified. UNICEF (2011) recommends dividing the developmental period in to early (age ten-14 years) and late adolescence (15-19 years) to represent the significant difference in experiences that separate these age groups. The current study focuses on the later phase of adolescence and specifically the experiences of 16 to 18 year olds and, where data are available, research findings relating to this specific age group will be elucidated and discussed.

Within this chapter, Section 1.2 will present and critically analyse theories of adolescence in relation to recent developments in the field. Section 1.2.4 discusses psychological factors in relation to the mental health of young people and highlights current mental health policy to



enhance services within the United Kingdom. Section 1.3 introduces the evolving field of positive psychology with a focus on the Well-being theory (Seligman, 2011) and within the context of the Government's well-being agenda. The concept of resilience is discussed in relation to risk and protective factors for adolescence within section 1.4. This leads into a critical analysis of theories of hope within a positive psychology framework in section 1.5 with a focus on Scioli's (2007) theory of hope in relation to well-being, resilience and adolescence. Section 1.6 summarises the rationale for the current research leading to section 1.7 which illustrates the aims and section 1.8 which details the research hypotheses.

### **1.1 Literature search**

The initial aim was to synthesise a narrative review of the developmental process of adolescence and its potential impact upon the well-being of young people, specifically in relation to the constructs of hope and resilience. Definitions of the psychological concepts of hope and resilience will be discussed and critiqued.

Literature was identified via the PsychInfo database and the following key words;

**adolescence, resilience, well-being, positive psychology, hope, and mental health.** The search was limited to peer reviewed academic journals between the dates of 2000 to 2012. The resulting journal articles frequently referenced key texts by respected authors within the field of resilience, positive psychology, and hope research which were also incorporated into the subsequent review of the literature.

## **1.2 Theories of adolescence**

***“Adolescence is a new birth”*** G. Stanley Hall (1904, cited in Savage, 2007, p 63)

In his seminal work ‘Adolescence’ (1904, cited in Savage, 2007), G. Stanley Hall, a genetic psychologist, proposed the first systematic definition of adolescence which in his view began at the age of 18 and ended at the age of 24. Hall (1904, cited in Savage, 2007) proposed that society begin to recognise adolescence as a distinct stage of life. He described it as a period of ‘storm and stress’ in which the young person negotiates a turbulent transition to adulthood, experiencing “rapid fluctuation of mood” and in which “the world seems strange and new” (G. Stanley Hall, 1904, cited in Savage, 2007, p71). The concept of adolescence as a ‘problem period’ in human development was reflected in classic psychoanalytic theory (Freud, 1937) and Erikson (1968) emphasised the developmental tasks of this life stage, that is, a coherent personal identity and increased autonomy.

However, the validity of Hall’s depiction of adolescence as a time of emotional turmoil has been questioned (Hendry & Kloep, 2012) and theories that purport adolescence as a problematic stage of life have been challenged (Lerner, 2009). Recent research indicates that the majority of young people manage the transition to adulthood relatively well (Jackson & Goosens, 2006). Thus, one of the main debates within this field of research relates to whether or not adolescence is a time of ‘storm and stress’ for young people.

The traditional view of adolescence as a developmental process in which the transition from childhood to adulthood is the principle task will now be discussed in relation to the biological, cognitive, and emotional changes that occur.

### **1.2.1 Biological development**

Alsaker and Flammer (2006) suggest that adolescence consists of a number of significant life transitions in which puberty represents the biological changes that mark the beginning of adolescence. The physical changes that occur during puberty, such as increased height and weight, may have a psychological impact on young people due to increased self-consciousness and sensitivity (Alsaker & Flammer, 2006), and reduced self-esteem (Coleman, 2011). These responses must, in part, be dependent on social context. Arnett and Taber (1994) state that there is no clear definition of when adolescence ends and thus the concept of adolescence as a 'transition' is criticised due to the extensive time period of change (Coleman, 2011).

### **1.2.2 Cognitive Development**

Inhelder and Piaget (1958) propose that by 15 years of age adolescents will achieve the Formal Operations stage and thus demonstrate increased flexibility in their thinking, enhanced problem solving abilities, and the ability to appreciate the potential consequences of their actions. However, the Formal Operations stage is a difficult concept to define and understand, and thus to apply in practice (Coleman, 2011).

The process of cognitive development facilitates the young person's ability to understand the complex social world in which we live (Coleman, 2011) and the decline in egocentrism that occurs during late adolescence (Elkind & Bowen, 1971) results in an increase in self awareness as a social being in relation to others and the wider world (Coleman, 2011).

### **1.2.3 Psychosocial Development**

Erikson (1959) proposed eight stages of psychosocial development that emerge as a result of the individual's interaction with the social environment and which each involve a developmental task or 'crisis' associated with psychological maturation. These stages begin at birth and continue throughout a person's lifespan and at each stage there is a developmental 'crisis'; the outcome of which is primarily adaptive or maladaptive. An example of this would be the initial stage in which the baby develops a dominant sense of trust (adaptive) or mistrust (maladaptive) in response to the care he or she receives from their mother or carer, and thus the attachment relationship. Coleman (2011) states that during late adolescence "The young person is engaged in a process in which making sense of the social world, and finding a comfortable place in it, is the key to psychological maturation" (Coleman, 2011, p 59).

According to Erikson (1968) adolescence occurs between the ages of 12 and 18 years and during this life stage the fundamental developmental task is to establish a coherent sense of identity and to overcome the potential for identity diffusion (Coleman, 2011). Erikson (1968) states that adolescence is a period in which the young person is faced with a number of significant challenges and decisions in relation to the key areas of their life, for example, relationships, education, and employment, and that crisis is required to enable him or her to reach a resolution regarding their identity. The inability to overcome the crisis may lead to maladaptive strategies associated with identity diffusion and thus psychological and social difficulties (Erikson, 1968).

Erikson (1968) purports four elements of identity diffusion. In terms of the challenge of intimacy, young people may be afraid to commit to interpersonal relationships due to concerns that they will lose their individual identity and as a result of this fear they may experience isolation or very formal relationships lacking in intimacy. The time component of identity diffusion is evident in young people who find it very difficult to make and follow a plan for their future, possibly due to fear of change and of making the transition to adulthood. In terms of the diffusion of industry the adolescent struggles to utilise their skills and to commit to achieving in areas of employment or education. An example of the diffusion of industry would be students who elect not to sit important academic examinations, such as GCSE's, thus limiting their opportunities for further education or employment. Pring and Hayward (2009) report that 16 to 18 year olds in particular find it difficult to identify a suitable pathway to further education resulting in a significant number of young people becoming what is described as not in education, employment, or training (NEET). Recent figures indicate that 150,000 16 and 17 years old are classified as NEET in the UK, and thus may be experiencing diffusion of industry, and require additional support to re-engage in education or training (Office for National Statistics, 2011). Finally, the negative identity aspect of diffusion may be apparent in young people who chose an identity that is opposed to the identity preferences of their families and communities, for example, on the basis of physical appearance or criminal activity (Erikson, 1968).

However, Erickson's theory of psychosocial development was based upon observations of his social environment and has been criticised as an ethnocentric theory in which cultural variability is ignored (Hendry & Kloep, 2012). It is recognised that the diffusion of industry represents a westernised view of 'industry' and success that is culture bound. This life stage theory has also been criticised for representing a general, as opposed to universal description that assumes development occurs sequentially on the basis of age and thus overlooks individual differences between young people (Hendy & Kloep, 2012). For example,

Coles (1996) described status transitions within late adolescence such as the transition from dependence upon the family to increased independence and the permanent move to live away from the family home. However, due to societal changes in recent years, the age at which young adults leave the parental home and thus become independent has increased significantly (Office for National Statistics, 2010) and thus life stage theories based upon chronological age have become outdated.

### **1.2.3.1 Emerging adulthood**

Arnett (2000) introduced the term 'Emerging Adulthood' to reflect the shift in societal norms in relation to late adolescence and early adulthood in Westernised societies. He proposed extending Erikson's (1968) theory of development to incorporate 'Emerging Adulthood' as an additional life stage between adolescence and adulthood to recognise the distinct psychological characteristics of young people aged between 18 years and 25 years (Arnett, 2000; 2004). Due to the paucity of age-specific data relating to 16 to 18 year olds, Arnett's theory will be discussed to encapsulate the later age range of adolescence and to consider challenges faced during the transition to adulthood.

Based upon his qualitative interviews with young people within this age range, Arnett (2001; 2004) described an age of 'feeling in-between', neither adolescent nor adult, where identity development is not complete (Hendry & Kloep, 2012). Identity formation is fundamental to this stage of development and young people utilise high levels of 'psychological energy' (Hendy & Kloep, 2012, page 83) to explore various identities. Arnett argues that the wide variety of life choices available in post-modern society represents 'the age of possibilities' and thus leads to 'many different emerging adulthoods' (Arnett, Kloep, Hendry & Tanner,

2011). However, this freedom of choice may be anxiety provoking for young people and lead to a loss of security and guidance in comparison to earlier generations for whom the life course seemed more clearly delineated (Hendry & Kloep, 2012).

Cote and Bynner (2008) acknowledge that the term 'Emerging Adulthood' represents a useful metaphor for societal changes but argue that it does not constitute a developmental theory. They argue that the evidence base for Arnett's (2000) psychological theory is limited and offers little added value in explaining young people's experiences. Hendry and Kloep (2012) support Cote and Bynner's criticisms and question whether a new life-stage is necessary or relevant. In addition, the critique levelled at Erikson's (1968) life stage model is applicable to Arnett (2000). Hendry and Kloep (2012) argue that his theory is culturally bound and does not represent a universal picture of development as some young people perceive themselves to have reached adulthood between the ages of 16 and 20 due to life experiences such as caring for their own children (Hendry & Kloep, 2010). Hendry and Kloep (2012) criticise Arnett et al (2011) for stigmatising young people who do not follow sequential life stages by describing them as 'non-normative' and endorse a systemic approach to exploring developmental variability.

#### **1.2.4 Psychological development**

Adolescence is a time of major psychological readjustment in relation to a young person's mental health and well-being (Larson, Moneta, Richards & Wilson, 2002) and this maturational process occurs within the context of ecological factors within their environment (Bronfenbrenner, 1979). Thus there is a dynamic interaction of young people's experiences within significant relationships, such as with family and peers and their perception of themselves as individuals within the wider world.

The theory of developmental contextualism (Bronfenbrenner, 1979) recognises the importance of the environmental context in which the young person is situated and the dynamic interaction of systems that are likely to influence their psychological development, such as their family, community, and the political, social, and historical context in which they are growing up. This point seems particularly salient in relation to the findings that the United Kingdom was ranked in the bottom third of 21 “economically advanced” countries regarding the well-being of children and adolescents between the ages of nought to 17 years (UNICEF, 2007). The dimensions measured included material well-being, educational well-being, family and peer relationships, and subjective wellbeing (UNICEF, 2007). The report acknowledged the limitations of the data in relation to age and gender, stating that much of the available data related to young people aged between 13 and 15 years old. The recent UNICEF (2013) report states that the United Kingdom has risen to 16<sup>th</sup> position in the table. However, the subjective wellbeing dimension was not measured in the recent study and thus there is no comparable data available.

Bronfenbrenner (1979) proposes that adolescence is a continuation of development of childhood rather than a distinct developmental stage or transition as proposed by the life course model of Erikson (1968). A key strength of developmental contextualism theory is that it highlights individual differences regarding the resources available to young people and the potential for resilience (Coleman, 2011) as opposed to ‘problems’. Resilience is defined as “the manifestation of positive adaptation despite significant life adversity” (Luthar, 2003, p xxix). There are factors that support this psychological readjustment and thus protect young people (protective factors) from negative experiences; and there are factors that increase young people’s vulnerability and thus increase their risk of developing mental health problems (risk factors).



**1.2.4.1 The mental health of young people**

The Mental Health Foundation (1999) defines 'mental health' as the capacity to develop psychologically and emotionally and to develop a sense of general well-being. Dodge, Daley, Huyton and Sanders (2012) propose a definition of well-being which equates to a person achieving a state of equilibrium or balance between the resources available to them and the challenges they face. However this balance can be altered by life events that challenge a person psychologically, physically and socially (Dodge et al, 2012) and thus well-being is a dynamic process which incorporates aspects of resilience.

Mental health problems are defined in terms of emotions or behaviours outside of the 'normal' range and which impact negatively on the person's level of functioning (Vostanis, 2007). Thus mental health represents a continuum in which an adolescent may be performing well, for example, academically but they are experiencing difficulties in family relationships. The distinction between mental health and mental disorder is indefinite and behaviours lie on a continua within the general population (Bentall, 2003) and thus the term 'abnormal' does not enhance our understanding of young people. The distinction between 'normal' and 'abnormal' behaviour in terms of mental health (Vostanis, 2007) is criticised for failing to account for the contextual or systemic factors in which the young person experiences emotional or behavioural difficulties, and for overlooking the individual differences and diversity of experiences of young people (Coleman & Hagell, 2007).

"The mental health of young people in transition from childhood to adulthood has been steadily declining" (McGorry, 2011, p 1) as the results of Collishaw, Maughan, Goodman and Pickles' (2004) longitudinal study indicate. McGorry (2011) states that the incidence of mental health problems 'surges' through the period of adolescence and peaks between the

ages of 18 and 25 years (Kessler, Berglund, Demler, Jin, Merikangas, & Walters, 2005). Late adolescence (age 15 to 19 years, UNICEF, 2011) presents an increased risk of the development of serious mental health problems such as psychosis (McGorry, Killackey & Yung, 2008) and suicidality (Coleman, 2011) which are beyond the scope of this chapter (see Grant & Potenza, 2009).

Green, McGinnity, Meltzer, Ford and Goodman (2005) report that one in ten children and young people between the ages of five to 16 years in the UK have a diagnosable mental health problem, most commonly an emotional (anxiety and depression) or conduct disorder, and that risk of mental health difficulties increases with age. However, this large scale study did not investigate the prevalence of mental health problems in the UK for young people between the age of 16 and 18 and thus this age group seems to have been overlooked.

Coleman (2011) suggests that factors such as higher levels of exam stress and the changing employment market may contribute to the decline in mental health in young people. The Mental Health Foundation (2006) reported that one in 15 young people had harmed themselves and that the incidence was four times higher in females. This study did not specify the age range of the young people reported to have self-harmed but stated that self-harm is more common in 11 to 25 year olds (Mental Health Foundation, 2006). Within the report, young people provided reasons for engaging in self harm, such as bullying, stress and worry, bereavement, problems in their family, and abuse (Mental Health Foundation, 2006). It is difficult to ascertain recent figures due to the hidden nature of self-harming behaviours but some reports indicate that the incidence of self-harm may have increased to one in 10 young people (Royal College of Psychiatrists, 2012). This study did not specify the age range that relates to their description of 'young people' and therefore it is not possible to make conclusions relating to the 16 to 18 population. It is unclear how much of this

increased prevalence is due to the improvements in the assessment and recognition of self-harm, and to society becoming more open about discussing mental health issues.

The results of a recent study conducted in New Zealand suggest that up to 50% of young people making the transition to adulthood will experience at least one episode of a mental health disorder (Gibbs, Fergusson & Horward, 2010). In conjunction with this, Eckersley (2011) highlights the challenges to well-being faced by young people as a result of recent social changes and suggests that the depth of mental health problems in adolescence remains unknown, equating this to the 'tip of the iceberg'. There is a paucity of data available regarding the health of young people in the UK (Kennedy, 2010; Young Minds, 2005) and it is difficult to generalise the findings of studies from Australia and New Zealand to the UK.

However, the most recent Adult Psychiatric Morbidity Study (McManus, Meltzer, Brugha, Bebbington & Jenkins, 2009) includes data regarding 16-24 year olds. The study indicates that 13% of males and 22% of females had a common mental health problem, which is defined by the survey as anxiety, depression, phobias, panic disorder and obsessive compulsive disorder. The statistics also indicate that 13.1% of young people had an eating disorder, and the incidence rate was three times higher for females as compared to males (McManus et al, 2009). However, due to the broad age grouping of 'young people' in this study (16-24 years) it is not possible to elucidate the data that specifically applies to 16 to 18 year olds. The current study will focus specifically on the well-being of young people aged 16 to 18 year olds with the aim of contributing age-specific data to the evidence base and enhancing our understanding of this time of transition.

#### **1.2.4.2 Mental Health Services for Children and Adolescents**

Within the UK there is a division between the provision of mental health services for children and young people, and for adults, and this represents a potential gap in services for 16 to 18 year olds making the transition to adulthood (Young Minds, 2005). Kennedy (2010) recognised this in his influential white paper, 'Getting it right for young people' (2010) in which he recommended that services should be joined up to allow for improved continuity of care into early adulthood on a flexible, needs led basis.

Kennedy (2010) described young people as "a 'forgotten group', caught between child and adult, and therefore between bureaucratic barriers" (Kennedy, 2010, p38). The Government accepted Kennedy's recommendation to invest in early intervention services for young people experiencing mental health problems and recognised the economic costs in *not* providing services to meet the needs of young people (H M Government, 2011b). The Improving Access to Psychological Therapy (IAPT) programme was also implemented for children and young people in 2012 (Layard, 2011).

Kennedy (2010) was influential in the development of the Department of Health strategy, 'Achieving equity and excellence for children and young people' (Department of Health, 2010a) and in recognising the important role that young people must play in the development of services to support 16 to 25 year olds. Young Minds (2005) recommend that young people are involved in the planning of services that are acceptable, accessible and appropriate for young people, areas which McGorry (2011) reports are currently lacking in the Western world, including the UK. The Department of Health document 'You're Welcome' (DOH, 2011) highlights the Government's quality control criteria for ensuring that health

services are 'young person friendly' and the commitment to the participation of young people up to the age of 20 years in the monitoring and evaluation of health services, including Child and Adolescent Mental Health Services (CAMHS).

Many young people find the transition to adulthood challenging but in contrast to the evidence indicating that a high percentage of young people experience mental health problems (Gibbs et al, 2010), the majority cope without encountering significant difficulties (Burke, Brennan & Roney, 2010). The accumulating evidence base regarding young people who are resilient and adapt well to the challenges of adolescence had led to a new perspective within clinical psychology which emphasises adaptation rather than disorder in understanding adolescence (Coleman & Hagell, 2007). Many young people encounter adversity and difficult life events beyond those experienced in the course of normal development but not all demonstrate mental health difficulties. The literature regarding resilience indicates that this is due to the dynamic interaction of risk and protective factors (Rutter, 1985).

### **1.3 The science of positive psychology (Seligman, 2002)**

Historically, the field of clinical psychology appeared to overlook personal qualities such as resourcefulness and resilience (Carr, 2011) until Seligman and Csikszentmihalyi (2000) introduced the field of positive psychology, which is defined as "the scientific study of what enables individuals and communities to thrive" (International Positive Psychology Association, 2009, cited in Compton & Hoffman, 2012, p2). Within positive psychology, a scientific approach is utilised to develop an understanding of 'positive' factors and then to enhance them, for example, the development of meaningful and supportive relationships

(Lopez & Snyder, 2009). There has been a move towards a positive psychology approach to clinical intervention in recent times (Carr, 2011) and factors that promote well-being such as hope (Scioli, 2007) and resilience (Olsson, Bond, Burns, Vella-Brodrick & Sawyer, 2003) have been identified.

In his original theory of Authentic Happiness, Seligman (2002) proposed three pillars of positive psychology; positive emotion, engagement, and meaning in one's life, and which draw upon a range of strengths. Positive emotion relates to pleasure, comfort and warmth, whereas engagement refers to what is described by Seligman (2002) as 'flow' which involves being in tune with the moment and is not related to one's emotional state. This theory purports that human beings are also searching for meaning and purpose in their lives, and that the combination of positive emotion, engagement and meaning equates to happiness. Seligman (2002) proposed that happiness could be measured by life-satisfaction and suggested that the goal for positive psychology would be to focus on increasing this.

### **1.3.1 The Well-being Theory (Seligman, 2011)**

However, Seligman (2011) acknowledged inadequacies in his original theory of Authentic Happiness (2002) such as the subjective nature of a mood based measure of life satisfaction, equating his theory to 'happiology'. Seligman (2011) also recognised the limitations of the measure of life satisfaction in capturing how engaged we are in our lives or how much purpose we demonstrate and thus key elements of well-being had been overlooked. Thus Seligman (2011) developed the Well-being Theory which incorporates the elements of positive emotion, engagement and meaning but expands the model to include positive relationships, and accomplishments in which people pursue success, achievement

and mastery. Well-being is a difficult concept to define (Thomas, 2009) and descriptions of dimensions of well-being, rather than a definitive definition of the construct, are frequently utilised (Dodge et al, 2012). This criticism applies to Seligman's theory in which he states that well-being is a construct which has several measurable elements, "each contributing to well-being, but none defining well-being" (Seligman, 2011, p 15).

Seligman states that "well-being is the focal topic of Positive Psychology" (Seligman, 2011, p15) with the goal of improving 'flourishing'. So and Huppert (2009) define flourishing in terms of the presence of core features of well-being, that is positive emotion, engagement, meaning, interest, and purpose, as well as three of the six additional features of self-esteem, vitality, positive relationships, self-determination, resilience, and optimism. However, McNulty and Fincham (2012) state that well-being is not solely determined by a person's psychological characteristics but by the dynamic relationship between those characteristics and environmental and contextual factors. Thus well-being is a complex and multi-faceted construct (Compton & Hoffman, 2012) leading to a lack of unity regarding its definition (Anderson, Jane-Lopis & Cooper, 2011) and measures of subjective well-being, psychological well-being, and emotional well-being have been utilised in the literature (Kinderman, Schwannauer, Pontin, & Tai, 2011).

An holistic definition is utilised for the purpose of the current study in which well-being is defined as "a positive state of mind and body, feeling safe and able to cope, with a sense of connection with people, communities and the wider environment" (Department of Health, 2010b, p12).

### **1.3.2 The well-being agenda in the UK**

The UK Government has demonstrated a commitment to increasing the mental health and well-being of the population across the lifespan and their vision is presented in the New Horizon's document which states "Our well-being and mental resilience is critical to a host of social and economic benefits - our physical health, our relationships, our education, our work and our productivity" (Department of Health, 2010b, p5). Thus revealing the economic driver to reduce health and social care costs related to people unable to work due to mental health difficulties (Layard, Clark, Knapp & Mayraz, 2007; The Foresight Report, 2008). According to the definition of well-being proposed by Dodge et al (2012), well-being is a state of equilibrium whereby there is a balance between the resources available and the challenges faced. However, resilience would be required in the face of adversity to draw upon the resources and to achieve the equilibrium necessary for well-being within a dynamic interaction of risk and protective factors (Rutter, 1985).

The New Horizon document also stated that "Childhood and early adolescence are key periods in the development of resilience and education and social skills that will provide the foundations of good mental health across the whole life course" (Department of Health, 2010b, p12). The well-being of young people will now be discussed within the positive psychology framework.



### **1.3.2.1 The well-being of young people**

There is minimal evidence regarding the well-being of young people, particularly age-specific data, and thus this is an area that requires further research (Dex & Hollingworth, 2012).

A central concern for positive psychology is identifying factors that characterise resilient young people and investigating how these factors help them to successfully emerge into adulthood, and thus demonstrate well-being, despite exposure to risk and adversity (Carr, 2011). Research has begun to focus on a strengths-based model of 'Positive Youth Development' (Lerner, 2009) which emphasises successful adaptation, or resilience, and assumes that young people have a range of resources available to them that can be developed and nurtured (Compton & Hoffman, 2012).

Kirshman, Johnson, Bender and Roberts (2009) report that hope in conjunction with the ability to interpret negative events in a positive light enables young people to 'flourish' as they enter adulthood. Thus hope may contribute to resilience, and both are positive psychological factors, but the constructs are theoretically distinct within the positive psychology framework (Youssef & Luthans, 2007). Hope is defined as 'goal-oriented thinking' (Snyder, 2002) which requires motivation and personal agency, and is considered a stable personality trait (Scioli, 2007). Resilience is adaptive and is activated in response to challenging life events highlighting the dynamic interplay of risk and protective factors outlined above (Rutter, 1985). Thus hope is conceptualised as proactive in comparison to resilience which is reactive (Youssef & Luthans, 2007).

Positive psychology has been criticised for neglecting the context in which people exist (Fincham & Beach, 2010; Maniaci & Reis, 2010) and for reducing psychological processes to either positive or negative (McNulty & Fincham, 2012) thus representing a value laden approach within psychology (Lazarus, 2003).

#### **1.4 The concept of resilience,**

Masten and Powell (2003) define resilience as “patterns of positive adaptation in the context of risk or adversity” (cited in Luthar, 2003, p 4). The psychological study of resilience evolved from research regarding children and young people who were vulnerable to developing mental health problems (Masten, 2007). Fergusson and Horwood (2003) report that with increasing exposure to adverse life events in childhood, there are significant increases in risk of mental health problems in adolescence. However, these authors also found that despite being exposed to major adverse life events, some young people demonstrate resilience in the face of such adversity as a result of protective factors and resources (Bynner, 2001). Rutter (1985) introduced the concept of protective factors, stating that protective factors mitigate risk, which is itself defined as the increased probability of an unfavourable outcome (Masten & Tellegen, 2012).

Garnezy and Rutter (1983) describe protective factors at the individual level, such as intelligence and positive self-esteem; familial level such as parental warmth and involvement; and community level such as social support networks and community resources. Masten, Cutuli, Herbers and Reed (2009) report protective factors for young people that include positive attachment relationships, authoritative parents, and socioeconomic advantage within the family system; good public health, safe neighbourhoods

and effective schools within the community; and good problem solving skills, self-regulation and a positive outlook on life within the child. Bynner (2001) proposes that the interaction of emotional, educational, social, and economic influences acts as a 'protective buffer' (Werner, 1995) around the young person and enables them to draw upon a variety of resources that enable them to cope when faced with adversity. Parents play a significant role in building resilience in young people and in supporting their transition to adulthood (Dishion, Nelson & Kavanagh, 2003; Luthar, 2003).

Despite numerous recent developments in this field (Shiner & Masten, 2012; see Sapienza & Masten, 2011 regarding biopsychosocial developments within the 'Fourth Wave' of resilience research), there remains a paucity of literature in relation to resilience in adolescence (Olsson et al, 2003). A unified theory of resilience has not been established (Luthar, Cicchetti & Baker, 2000) and thus the concept has been interpreted in different ways by researchers (Evans & Pinnock, 2007) with cross study variation resulting in confusion within the field of adolescent resilience (Olsson et al, 2003). Daniel (2005) states that little research exists regarding interventions to increase the resilience of adolescents in times of adversity.

A further proposed criticism is that the resiliency paradigm has the potential to foster a 'blame culture' in which young people who do not demonstrate resilience when faced with adversity are judged negatively in comparison to those young people who do (Luthar & Zelazo, 2003). Olsson et al (2003) highlight the use of value judgements within the resiliency paradigm in that demonstrating resilience may not always result in a positive outcome; for example, a young person experiencing chronic adversity who continues to demonstrate resilience over a prolonged period of time may be repressing their emotions when in fact the healthy response may be to display their distress and emotions and to seek appropriate support. It must be recognised that resilience is not a stable characteristic but fluid and

changeable over time (Masten & Tellegen, 2012), and is related to the availability of protective factors (Bynner, 2001).

The Penn Resiliency Program was developed with the aim of reducing depression in adolescence (Gillham, Brunwasser, Freres, Abela & Hankin, 2008) and enhancing resilience and well-being in young people (Challen, Noden, West & Machin, 2011). It is conceptualised as a means of developing young people's well-being within the school environment (Seligman, 2011) by teaching 'learned optimism', for example how to reinterpret life events in a more flexible and positive style. The programme teaches young people coping strategies, such as problem solving and assertiveness, and a sense of hopefulness, to enable them to manage the challenges they face in adolescence (Seligman, 2011). Gillham et al (2008) report that the Penn Resiliency Program significantly reduces scores on measures of hopelessness and depression and increases levels of optimism (Gillham & Reivich, 2004). The UK Resilience Programme, based on the curriculum of the Penn Resiliency Program, was piloted with pupils aged 11 to 12 years over a three year period. Results indicate that it had a small impact on depression scores and educational attainment, but that these improvements were not sustained at two year follow up (Challen et al, 2011). However, Challen et al (2011) suggest that the measures used were not sufficiently sensitive to change to detect improvements in those young people who were already demonstrating good behaviour, school attendance, and well-being. It may be that these young people did not actually require the Programme and thus a targeted approach to enhancing resilience may be indicated.

### **1.5 Theories of hope**

Optimism is defined as a generalised expectation of desirable future outcomes (Carver, Scheier & Segerstrom, 2010). However, whereas optimism is an attributional style, hope has been defined in terms of 'goal-oriented thinking' by Snyder (2002) in relation to the person's sense of motivation, purpose and perceived ability to attain their goals. Seligman's (2011) Well-being Theory incorporates dimensions of purpose and meaning in relation to the pursuit of accomplishments, and thus hope is related to well-being. Snyder (2000) conceptualises hope as both the ability to plan strategies to achieve goals (despite potential barriers and adversity, and to thus demonstrate resilience) and the motivation to utilise these strategies. He states that this process is fundamental to the origin of hope.

Snyder (2002) adopts a 'hope-centred' approach to positive psychological functioning (Scioli, Ricci, Nyugen & Scioli, 2011) and research indicates that there is a strong positive relationship between a sense of purpose and hope (Feldman & Snyder, 2005), and purpose and well-being (Ryan & Deci, 2001). Goal-oriented thinking is associated with increased positive mood and thus may represent a protective factor against mental health difficulties such as depression (King, Hicks, Krull & Del Gaiso, 2006). Therefore Burrow, O'Dell and Hill (2010) suggest that an understanding of the role of hope and purpose would enhance our understanding of the factors that promote positive youth development and resilience during adolescence.

Snyder (2000) has posed that hope is a developmental process following a delineated pattern throughout infancy and childhood and into adolescence and thus represents similarities to Erikson's theory of psychosocial development. The dynamic and complex

cognitive and psychosocial development that occurs during adolescence facilitates the achievement of developmental tasks such as increased autonomy and independence from parents and future-planning regarding further education or employment (Erikson, 1968). The challenges and potential barriers that young people face during adolescence thus present opportunities for them to develop and utilise their hopeful skills to plan and pursue their goals for success (Carr, 2011). Erikson (1964) claimed that the successful resolution of these developmental crises would result in the ‘human virtue’ or ‘quality of strength’ of hope.

Park, Peterson and Seligman (2004a) found that hope, zest, gratitude and love were robustly associated with life satisfaction in adults and these findings were replicated by Park and Peterson (2006) in relation to hope and life satisfaction in adolescents. However, Park, Peterson and Seligman (2004b) later reported that, although hope was a significant predictor in their study with adults, it was no more robust than the other strengths of zest, gratitude and love. In a recent study, Toner, Haslam, Robinson and Williams (2012) report that hope is a strong and reliable predictor of well-being in young people between the ages of 15 and 18 years. In addition, hopeful people demonstrate resilience in times of adversity (Peterson, Rush, Beerman, Park & Seligman, 2007). Thus within the model of positive psychology and resilience research, hope theory offers the opportunity to enhance young people’s well-being in times of adversity. However, within this study, hope is defined as “hope, optimism and future-mindedness” and further research is required to elucidate hope as a distinct construct in relation to its influence on well-being.

Hope therapy was developed from Synder’s (2000) theory of hope, and is based on the premise that well-being is enhanced when people develop clear goals which they believe are attainable due to the resources they possess (Rand & Cheavens, 2009). It incorporates tenets of cognitive behavioural therapy with the aim of facilitating the client’s ability to

develop personal goals, and to conceptualise various pathways to achieving the desired outcome (Carr, 2011). Chang (2003) reported that within the general population, people who are hopeful demonstrate increased levels of life-satisfaction, as previously described in Seligman's (2002) theory of Authentic Happiness, and are less likely to have depression. This finding is supported by Shorey, Little, Snyder, Kluck and Robitscheck, (2007) who state that hope is positively associated with psychological well-being.

### **1.5.1 Scioli's (2007) Theory of Hope**

Scioli et al (2011) criticise the field of clinical psychology for continuing to define hope in terms of a goal-oriented approach, thus failing to recognise deeper psychological processes associated with this emotional resource. They state that minimal progress has been made in relation to the theory of hope in recent years, and purport that numerous questions remain regarding its definition and measurability. Scioli (2007) reports the failure in the literature to adequately conceptualise hope as a complex emotion with cognitive, social, and spiritual components, and highlights the lack of conceptual clarity regarding hope in the emerging literature from the field of positive psychology. Scioli et al (2011) state that the social, biological and psychological sciences would benefit from a measure of hope that is theoretically based.

However, Scioli (2007) recognises that hope incorporates many of the strengths emphasised in the field of positive psychology including perseverance (mastery), relatedness (attachment), and adaptive self-regulation (survival). Scioli (2007) defined hope as an emotional network that incorporates biological, psychological and social resources, and recommends an integrative approach to hope that includes attachment, mastery, survival

and spirituality to facilitate the assessment of well-being. Scioli et al (2011) describe these elements as the 'biological blueprints for hope' and recognise the significant role that contextual factors such as the individual's family, culture, and belief systems play in the development of hope, reflecting the theory of developmental contextualism in relation to young people's experience (Bronfenbrenner, 1979).

Scioli (2007) states that attachment relationships develop on the basis of the individual's level of relational trust and openness. This develops in childhood in response to their early experience of attachment with their caregivers (Erikson, 1968). The ability to trust other people facilitates the development of intimacy in relationships and thus enables the individual to develop the hope-based trait of "The Attached Self". Survival-oriented trust relates to the individual's belief that their well-being is of importance to another person (or group) and thus represents the opportunity for them to seek social support at times of adversity and develop the hope-based trait of "The Resilient Self". Thus there is an overlap between hope and resilience in terms of relationships with others but these are distinct in terms of their context. Hope-based resilience relates to relying on others to feel hopeful whereas within resilience, social support is one of a number of resources required to counteract adversity. Hope-based mastery incorporates the individual's beliefs regarding the pursuit and achievement of their goals and thus to develop a feeling of empowerment within the hope-based trait of "The Empowered Self".

Scioli (2007) purports hope as an essential protective factor in relation to psychological, physical, and social functioning when an individual is faced with adversity, and thus hope appears to be theoretically linked to the construct of resilience. Rand and Cheavens (2009) state that young people with high levels of hope demonstrate superior psychological adjustment when faced with adversity, thus demonstrating resilience, and are more



successful at developing and maintaining social support networks. Lazarus (2003) purports that hope is a concept that encompasses aspects of positive psychology and traditional clinical psychology in relation to both stress and adversity, and mental health and well-being. This theory incorporates elements of the theories of adolescence, resilience, well-being and hope discussed previously and represents both a holistic and positive psychology approach to understanding the experiences of young people within the context of the current research.

### **1.6 Rationale of the current research**

This study reflects the recent perspective within clinical psychology of positive adaptation rather than disorder in relation to the developmental period of adolescence (Coleman & Hagell, 2007) and the necessity for further research in this field (Coleman, 2011). This research is also timely and relevant within the context of the Well-being agenda (DoH, 2010b) within the UK. As highlighted by Dex & Hollingworth (2012), the evidence base regarding the well-being of young people within a specified age range is limited and requires further research. Therefore this study focuses on the experiences of young people whose ages range from 16 to 18 years, a ‘forgotten group’ (Kennedy, 2010) who fall between the later stage of adolescence as defined by Erikson’s (1968) theory and the beginning of ‘Emerging Adulthood’ as described by Arnett’s (2000) psychological theory regarding the life stage between adolescence and adulthood.

The established evidence base regarding positive psychology, well-being, resilience, and hope generally applies to children or adults, but the mental health and well-being of young people who are negotiating the potentially difficult transition to adulthood is consistently neglected. For example, Olsson et al (2003) report that there is a paucity of literature

regarding resilience in adolescence and Daniel (2005) states that resilience in relation to the well-being of young people is an area that warrants further research. Toner et al (2012) claim that their study is original as it is one of very few to examine what they describe as 'character strengths' such as hope in relation to the well-being of young people. The claim of originality may also apply to the current study in relation to its exploration of the positive psychological factors of hope, resilience, and the well-being of young people between the ages of 16 and 18 years.

### **1.7 Aims of the current research**

The overarching aim of this study was to investigate the role of hope and resilience in relation to well-being in late adolescence in a population sample of young people aged between 16 and 18 years.

At a wider level it was intended that this study would contribute to the evidence base regarding the well-being of young people in the United Kingdom which will ultimately inform clinical practice to support this 'forgotten group' (Kennedy, 2010) to develop the resources required to demonstrate resilience and well-being during the transition to adulthood.

### **1.8 Hypotheses**

1. There will be a significant positive relationship between well-being and hope.
2. There will be a significant positive relationship between well-being and resilience.
3. There will be a significant positive relationship between hope and resilience.
4. There will be a positive association between hope and well-being, and hope will account for more of the variance in comparison to resilience.

## **2.0 Method**

### **2.1 Ethical approval**

The Division of Clinical Psychology Research Committee approved the initial research proposal in July 2010 (Appendix I). The original aim of the research was to compare the scores of 16 to 18 year olds recruited from specialist NHS Child and Adolescent Mental Health Service (CAMHS) teams with the scores of students aged 16 to 18 years recruited from a college within the same geographical area as the CAMHS teams. Thus ethical approval was sought and granted from the North West Research Ethics Committee (NREC) in July 2011 and the relevant NHS Trust Research and Development Department (Appendix II).

The researcher contacted the relevant link professional working within each of the four colleges identified within the region of the North West of England that corresponded geographically with the specialist CAMH teams. The researcher introduced the study via email and three of the link professionals requested further details, including a copy of the research proposal and measures, but one college did not respond. Of the four colleges approached, one college approved the researcher's request to recruit students between the ages of 16 and 18 years to the study (Appendix III). Recruitment of participants began upon receipt of written confirmation of ethical approval from NREC.

## **2.2 Design**

The design involved a cross-sectional questionnaire design, utilising standardised self-report questionnaires completed at a single time-point.

## **2.3 Participants**

All students aged between 16 and 18 years who attended the specified college of Further Education in an area of the North West of England were invited to participate. The college consisted of approximately 7000 students and offered 300 different courses including vocational qualifications, apprenticeships, diplomas, and A Levels. Participants were recruited across three college sites with the aim of gathering a sample to represent the range of vocational and academic studies being undertaken. The only exclusion criteria related to age whereby students who were not aged between 16 and 18 years were excluded.

It was necessary to remove the data of 15 young people recruited from the specialist 16 to 18 CAMHS team as they completed the CORE-OM as part of the service outcome measures and thus the data from the Well-being dimension was collected at a different time point to the other research measures in the current study.

## **2.4 Sample characteristics**

Demographic information including the age and gender of the participants was gathered. Data regarding participants' living arrangements, for example, residing with parents, independently, or under the care of the local authority, was recorded to capture the diversity of this population. Information regarding previous or current contact with mental health services was also gathered from all participants in recognition that young people attending college may have experience of statutory and non-statutory support services.

## **2.5 Pilot study with college students**

Within the college, the link professional was an A-Level Psychology tutor who was keen for her students to gain experience of psychological research. It was agreed that, with the students' consent, a pilot study of the measures would be conducted with two groups of A-Level Psychology college students using the approved research procedure. The Psychology tutor presented the students with the Participant Information Sheet (Appendix IV) a minimum of 24 hours prior to the date agreed for the researcher to attend the college. The researcher confirmed with each young person that they had had the opportunity to read the Participant Information Sheet and they were each asked to sign a form to confirm that they consented to participate. Thirteen students were invited to participate and all of them accepted and provided informed consent.

The students completed the research measures in the following order (Appendix V):

- Measure 1: Demographic Information Sheet
- Measure 2: Resiliency Scales for Children and Adolescents
- Measure 3: Clinical Outcomes in Routine Evaluation Outcome Measure (CORE-OM)
- Measure 4: Comprehensive Hope Scale- Trait Version (CHS-TV)

Each participant was provided with an information sheet regarding available services (Appendix VI) should they be experiencing emotional difficulties. The research team's contact details were also provided within the Participant Information Sheet should they experience distress as a result of participating in the pilot study. The researcher was not contacted during the study by any participants.

Each group was timed as to how long it took them to complete the measures with the average time being approximately 16 minutes. Feedback was gathered from the students as a group and was generally positive. The young people agreed that none of the questions seemed too intrusive and stated that the fact their responses remained anonymous enabled them to answer the questions more honestly. The students stated that some of the questions were repetitive and confusing as each measure utilised a different scale to record their answer. The researcher reflected that a reverse scale was often used in questionnaires to detect consistency in responses and the young people accepted this explanation. The students did not raise any major concerns regarding the content of the questionnaires.

The students designed a poster to advertise the study (Appendix VII) which was published on college bulletin boards with details regarding when the researcher would be attending

college to conduct recruitment. This poster was submitted to NREC for approval which was granted (Appendix VIII).

## **2.6 Method of current study**

### **2.6.1 Research measures**

#### **2.6.1.1 Demographic Information Sheet**

The Participant Identification number was recorded on the Demographic Information Sheet and the information gathered was anonymous. The Demographic Information Sheet was developed by the researcher to gather information regarding the age, gender and ethnicity (see Appendix V).

Information was requested from participants regarding their living arrangements and options were provided, for example living with parents or in the care of the local authority, and participants were asked to tick the response relevant to them. This demographic information was gathered to capture any diversity within the population that might have influenced the results.

Information was gathered regarding any previous or current contact with mental health services to identify potential confounding variables that might have impacted upon the findings regarding well-being in this population.



**2.6.1.2 Resiliency Scales for Children and Adolescents (RSCA; Prince-Embury, 2007)**

The RSCA (Prince-Embury, 2007) were developed to assess resilience in clinical and general populations (Prince-Embury, 2010; Prince-Embury & Steer, 2010), with the purpose of identifying children and young people at risk of negative outcomes and with a view to implementing preventative interventions when indicated (Luther & Zelazo, 2003). The research and evidence base regarding resilience, in conjunction with developmental theory, forms the foundation of the RSCA, and its three factor structure was confirmed by Prince-Embury and Courville (2008). The RSCA consists of three self-report scales; Sense of Mastery; Sense of Relatedness; and the Reactivity Scales; of which there are 10 sub-scales that constitute key factors of the main constructs.

1. **Sense of Mastery Scale:** 20 items. A strengths-based scale consisting of sub-scales measuring self-efficacy, optimism, and adaptability
2. **Sense of Relatedness Scale:** 24 items. A strengths-based scale incorporating the sub-scales of trust, perceived support, comfort, and tolerance
3. **Reactivity Scale:** 20 items. Reactivity relates to vulnerability and physiological arousal in response to stressors; and incorporates the sub-scales of sensitivity, recovery, and impairment

The RSCA also measures the relationship of these factors to each other (Prince-Embury, 2007).

Each of the three scales takes approximately 5 minutes to complete. The combined RSCA consist of a total of 64 items and each item is responded to using a 5 point Likert scale in which 0 = never; 1 = rarely; 2 = sometimes; 3 = often; and 4 = almost always. For research

purposes the RSCA is generally scored using the total score for each of the three main factor scales. However, in clinical practice, scores can be calculated to produce a Resource Index and Vulnerability Index representing a unique resiliency profile of each young person's strengths and vulnerabilities (Prince-Embury, 2007). RSCA scores are normed by gender within three age bands; 9-11 years; 12-14 years; and 15-18 years.

Prince-Embury and Courville (2008) report that the three scales of the RSCA demonstrate excellent psychometric qualities. The internal consistency of the RSCA global scales for adolescents (aged 15-18 years) is reported to be comparable with the internal consistency of the normative sample (Prince-Embury, 2010). In a study conducted by Prince-Embury (2010), for the Sense of Mastery scale  $\alpha = .93$  for the clinical sample and  $\alpha = .95$  for the non-clinical sample; for the Sense of Relatedness scale  $\alpha = .94$  for the clinical sample and  $\alpha = .95$  for the normative sample, and for the Reactivity scale  $\alpha = .92$  for the clinical sample was and  $\alpha = .94$  for the non-clinical sample. In the current study, for the Sense of Mastery scale  $\alpha = .92$ , for the Sense of Relatedness scale  $\alpha = .93$ , and for the Emotional Reactivity scale  $\alpha = .90$ .

The three scales also demonstrate criterion group validity in terms of differentiating between clinical and general samples and Prince-Embury (2007; 2008) reported that the differences between scores represented large effect sizes.

### **2.6.1.3 Clinical Outcomes in Routine Evaluation Outcome Measure (CORE-OM)**

The CORE-OM is a 34 item self-report measure relating to how clients have been feeling over the past week and is one of the most widely used outcome measures for psychological therapies in the UK (Barkham, Margison, Leach, Lucock, Mellor-Clark, Benson, McGrath et

al, 2001; Evans, Connell, Barkham, Margison, McGrath & Audin, 2002). The CORE-OM has previously been recommended for use with young people over the age of 16 by CAMHS Outcome Research Consortium (CORC), a learning collaboration dedicated to improving the quality of services for children and young people. Thus the CORE-OM was selected as an age-appropriate measure for use with the current sample.

There are four dimensions; subjective well-being; problems/symptoms; life functioning; and risk/harm. The responses are designed to provide a mean score to indicate the current level of psychological global distress ranging from 'healthy' to 'severe'. Joseph and Wood (2010) suggest assessing the construct validity of existing clinical measures in assessing aspects of positive functioning within the theoretical context of positive psychology. The Well-being dimension of the CORE-OM was selected to measure the well-being of 16 to 18 year olds in the current research as the CORE-OM is used widely in clinical practice (Barkham et al (2001) and specifically within specialist CAMHS teams for 16 to 18 year olds.

The CORE System Handbook (Core System Group, 1998) indicates that mean item scores for individual dimensions may be used separately and the Well-being dimension was utilised as the dependent variable for the purpose of the current study. The Well-being dimension consists of four items, two of which are worded positively and two of which are worded negatively. As with the other dimensions on the CORE-OM, the Well-being dimension is problem scored and thus a high score indicates low levels of well-being. The CORE System Handbook (Core System Group, 1998) indicates that the cut-off point between clinical and non-clinical scores the Well-being dimension is 1.37 for males and 1.77 for females.

The CORE-OM is a reliable and valid instrument with good sensitivity to change and it is acceptable in a wide range of practice settings (Evans et al, 2002). Sinclair, Barkham, Evans, Connell and Audin (2005) state that the CORE-OM demonstrates good internal consistency ( $\alpha = .94$ ) and that each of the four dimensions demonstrate Cronbach's alphas  $>.75$ . In the current study, the Cronbach coefficient was .52 indicating that the Well-being dimension of the CORE-OM demonstrated less than acceptable reliability with this sample.

#### **2.6.1.4 Comprehensive Hope Scale-Trait Version (CHS-T) (Scioli, 2010)**

Snyder, Harris, Anderson, Holleran, Irving, Sigmon and Harney's (1991) measure of hope is the most widely used within psychology (Scioli et al, 2011) and Snyder and colleagues have developed a series of scales to measure goal-oriented aspects of hope in samples of either adults or children. Examples include the Adult Dispositional Scale and the Young Children's Hope Scale (Rand & Cheavens, 2009). However, in an attempt to overcome a lack of theoretical basis to previous measures of hope (Scioli et al, 2011), and with a view to developing a measure for use with young people, Scioli (2010) developed The Comprehensive Trait Hope Scale. This is a multidimensional measure derived from Scioli's (2007) theory of hope and for which normative data have been gathered from the general population, including a sample of college students aged between 18 and 22 years (Scioli et al, 2011). Thus the CHS-T was selected in the current study as a result of its utility with young people and due to its holistic approach to assessment that goes beyond 'goal oriented' thinking (Snyder, 2000). As Scioli (2007) states, an integrative approach to hope which includes elements of the concepts of attachment, mastery, and survival, offers a powerful approach to measuring subjective well-being.

The CHS-T is derived from an integrative theory of hope (Scioli, 2007; Scioli & Biller, 2009) and assesses an individual's "deeper reservoir of hope traits and skills" (Scioli et al, 2011). It includes three aspects of the "Hopeful Core"; the Attached Self; the Empowered Self; and the Resilient Self. It is based on the individual's developmental history and includes measures of Mastery, Attachment, Survival and Spirituality. The CHS-T consists of 56 items and is a self-report measure in which respondents utilise a 4-point Likert scale (Not Me = 0 to Exactly Like Me = 3). An example of an item from the scale related to the attachment cluster is "There are people in my life that I can completely trust". The Hope Scale has predominately been used in health psychology research and a recent study revealed that hope is a significant factor in determining the health status of people who are HIV Positive (Scioli, MacNeil, Partridge, Tinker & Hawkins, 2012).

The Scale can be scored using total hope scores or the hope sub-scale scores (Scioli, MacNeil, Partridge, Tinker, & Hawkins (2012). Scioli et al (2011) report that the CHS-T demonstrates excellent internal consistency ( $\alpha=.95$ ) and these findings were replicated with the current sample ( $\alpha=.92$ ). Scioli et al (2011) state that as a result of its robust reliability, researchers are able to chose to utilise all or part of the CHS-T, including the use of spirituality or non-spirituality scales (Scioli et al, 2011). Previous research indicates that spirituality may contribute less to the life satisfaction of young people as compared with adults (Park, 2004) and Toner et al (2012) report that spirituality was the least endorsed of the 'character strengths' in a recent study with young people aged between 15 to 18 years. Therefore, based on the findings of these studies regarding spirituality in young people in conjunction with the lack of association between spirituality hope and health reported by Scioli et al (2012), the researcher elected to utilise the non-spirituality scale of the CHS-T, which consists of 28 items as compared with the 56 item CHS-T. The aim of utilising the shorter measure was to reduce the time-demands on participants whilst maintaining reliability.

## **2.6.2 Procedure**

### **2.6.2.1 Recruitment from college**

The college had three sites situated adjacently which catered for a range of students accessing both vocational and non-vocational courses; such as joinery, car mechanics, and A Levels. Participants were recruited across the three sites thus enhancing diversity and reflecting the range of experiences associated with young people aged 16 to 18 years.

The Participant Information Sheet and the poster designed by the A-Level students were published on the college's electronic bulletin board that was displayed and discussed in weekly tutorials. Tutors contacted the college link person if their tutees were interested in participating in the study. Those students who expressed an interest were provided with the Participant Information Sheet by their tutor and a date was arranged for the researcher to attend the relevant tutorial and administer the measures utilising the following procedure.

### **2.6.2.2 Administration of research measures**

When a young person consented to participate, they were asked to read and sign a consent form (Appendix IX). The participant was given a copy of the consent form signed by the clinician or researcher gathering consent, and a copy was retained by the clinician or researcher to store securely. Once informed consent had been gathered the young person was given an envelope containing the research measures (Appendix V) and was left alone in the clinic room or allocated college room to complete the measures independently and confidentially.

The measures were presented in the envelope in the following order:

- Measure 1: Demographic Information sheet
- Measure 2: CORE-OM
- Measure 3: The Resiliency scales for Children and Adolescents
- Measure 4: The Comprehensive Hope Scale- Trait Version

Each participant was allocated a participant identification number which was recorded on the questionnaires thus ensuring anonymity of personal data such as their names. Each participant was given a copy of the information sheet regarding available services should they be experiencing distress.

The participant was instructed to place their completed questionnaires into the envelope provided and to return it to the clinician or researcher.

#### **2.6.2.3 Prize draw**

Participants were invited to enter a prize draw as an incentive for taking part in the research study and were asked to consent for their name to be entered into the draw. The first prize was £50 worth of high street vouchers, the second prize was £25 of high street vouchers and third prize was £10 of high street vouchers (Appendix X, Prize draw consent sheet).

## **2.7 Response rates**

It was not possible to accurately assess the response rates in relation to participants recruited from the college as the Participant Information Sheet was published on the electronic bulletin board and thus there is no record of the number of students who read it and decided not to participate. However, of the 68 young people approached, 65 consented and only three young people declined to participate. 10 young people who were approached were ineligible for the study on the basis of their age (over 18).

## **2.8 Missing data**

### **2.8.1 The Comprehensive Hope Scale**

From the sample of 50 participants, two participants did not complete any items on the Comprehensive Hope Scale. A further eight participants did not complete items 20-28 on this scale thus 28.6% of the data were missing in relation to the Comprehensive Hope scale for each of these participants. Therefore the data for a total of 10 participants were removed from the analysis regarding this variable resulting in  $n = 40$ . However the data available from these 10 participants in relation to the CORE-OM and Resiliency scales were utilised in subsequent analyses.



## **2.9 Data screening**

The data were entered and analysed using Statistical Packages for Social Sciences (SPSS version 20.0, 2011). Preliminary analyses were performed to ensure that the assumptions of normality, linearity and homoscedasticity were not violated (Appendix XI, Scatterplots).

Graphical representations were produced to visually assess for normal distribution of the data (Appendix XII, Histograms). The Kolmogorov-Smirnov (K-S) Test was conducted to compare the scores in the sample to a normally distributed set of scores with the same mean and Standard Deviation. The test is significant if  $p < .05$  and thus the scores on a particular variable are significantly different from a normal distribution. The results of the K-S test indicated that the data on each of the variables met the assumption of normal distribution in relation to parametric analysis (Appendix XIII, Table of skewness and kurtosis).

### **2.9.1 Outliers and residuals**

Boxplots were generated to assess for any outliers but none were identified. The use of regression analysis enabled diagnostics to be run to further examine outliers and residuals in the current data. Field (2009) recommends that standardised residuals greater than 3 should be investigated further utilising the following statistics:

1. Cook's Distance
1. Mahalanobis Distance Value
2. Leverage Values

3. DFBeta Statistics.

There were no significant issues from the data set relating to outliers and residuals.

### **3.0 Results**

#### **3.1 Demographic characteristics**

The sample consisted of 50 young people whose ages ranged from 16 to 18 years and the median age was 17 years, range 2 (n=46, missing data n=4). Table 1 illustrates the percentage of ages of 16, 17, and 18 year olds within the sample. In terms of gender, 24% of the participants were female (n=12) and 76% were male (n=38). As shown in Table 1, 90% of the sample lived with their parent(s) (n=45) and 6% of the participants were under the care of the local authority (n=3). In terms of ethnicity, 84% of the sample were white British (n=42), 2% were Asian (n=1), and 2% were of dual heritage (n=1). The data regarding ethnic origin were missing for 10% of the sample (n=5).

**Table 1:** Demographic information regarding the sample

<b>Demographics</b>	<b>N</b>	<b>%</b>	<b>Missing data N (%)</b>
<b>Age</b>			<b>4 (8)</b>
16	19	38	
17	16	32	
18	11	22	
<b>Gender</b>			
Female	12	24	
Male	38	76	
<b>Living Arrangements</b>			
With parents	45	90	
With other family	1	2	
On own/independently	1	2	
In care of local authority	3	6	
<b>Ethnicity</b>			<b>5 (10)</b>
White British	42	84	
Asian	1	2	
Dual heritage	1	2	
Other	1	2	

Table 2 demonstrates that of the sample of 50 young people attending college, 14% (n=7) reported that they had been referred to mental health services and 86% (n=43) said that they had not been referred to either statutory or non-statutory services regarding their mental health. Of the 14% of young people who had been referred to mental health services, 2% (n=1) were currently attending appointments and 8% (n=4) had previously attended appointments. 2 participants (4%) who had been referred to mental health services had been offered appointments but had declined to attend and thus had not received an intervention.

**Table 2:** Demographic information regarding contact with mental health services

<b>Referral to Mental Health Services</b>	<b>N</b>	<b>%</b>
Referred	7	14
Not referred	43	86
Currently attending	1	2
Previously attended	4	8
Referred but declined	2	4

### **3.2 Means and standard deviations**

Table 3 shows the mean, standard deviation (SD), and range of the mean of the total scores for the sample across each of the measures. The mean item scores on the Well-being dimension of the CORE-OM was 1.22 (SD .74) and the range was 2.75. Overall 36% (n=18) of the participants scored above the clinical cut-off on the Well-being dimension which is 1.37 for males and 1.77 for females (CORE System Group, 1998) thus indicating that they were reporting significantly low levels of well-being. The range and Standard Deviation for each of the measures indicates the variance of scores across the sample and may be indicative of the continuum of mental health and well-being experienced by young people.

**Table 3:** The Mean, Standard Deviation and Range of the mean total scores for each measure

Measure	Mean	SD	Range
<b>CORE-OM</b>			
Well-being dimension	1.22 (n=50)	.74	2.75
<b>Resiliency Scales</b>			
Mastery scale	2.69 (n=50)	.60	2.85
Relatedness scale	2.84 (n=50)	.63	2.62
Reactivity scale	1.22 (n=50)	.59	2.65
<b>Comprehensive Hope Scale</b>			
Trait Hope	1.75 (n=40)	.53	1.75

### **3.3 Analysis of the data**

Preliminary analysis revealed that that data met the assumptions regarding parametric testing and thus Pearson product-moment correlations and hierarchical multiple regression were conducted to test the hypotheses. The approach taken to manage missing data was the Pairwise deletion method as recommended by Pallant (2006) as this is frequently used for correlation models and linear models including regression (Allison, 2000), and maximises the use of the data set.

#### **3.3.1 Pearson's correlations**

Table 4 shows the Correlation Matrix regarding all of the variables and indicates significant relationships between well-being, hope, and the three scales of the RSCA which measure related constructs of resilience, that is, mastery, relatedness, and emotional reactivity. The Well-being dimension of the CORE-OM and the Reactivity scale of the RSCA are both

problem scored and thus the higher the score, the more difficulties the participant is reporting.

**Table 4:** Correlation Matrix of the relationships between all of the variables

	<b>CORE Well-being</b>	<b>Mastery</b>	<b>Relatedness</b>	<b>Reactivity</b>
<b>CORE Well-being</b>	-	-	-	-
<b>Mastery</b>	<b>-.52**</b> n=50	-	-	-
<b>Relatedness</b>	<b>-.47**</b> n=50	<b>.60**</b> n=50	-	-
<b>Reactivity</b>	<b>.48**</b> n=50	<b>-.35**</b> n=50	<b>-.46**</b> n=50	-
<b>Hope</b>	<b>-.61**</b> n=40	<b>.60**</b> n=40	<b>.68**</b> n=40	<b>-.28*</b> n=40

**\*\*.** Correlation is significant at the  $p < 0.01$  level (1 tailed).

**\*.** Correlation is significant at the  $p < 0.05$  level (1 tailed).

**3.3.2 Well-being and hope**

**Hypothesis 1: There will be a significant positive relationship between well-being and hope.**

Correlational analysis revealed a significant negative relationship between the measures of hope and well-being [ $r = -.61$ ,  $n=40$ ,  $p<.01$ ]. Low scores on the Well-being dimension indicate high levels of well-being thus explaining the negative direction of the relationship. The results indicated that higher levels of well-being were associated with increased levels of hope and thus Hypothesis 1 is supported.

**3.3.3 Well-being and resilience**

**Hypothesis 2: There will be a significant positive relationship between well-being and resilience.**

The results of the analysis revealed a significant negative correlation between the Well-being dimension and resilience as measured by the Mastery scale [ $r = -.52$ ,  $n=50$ ,  $p<0.01$ ]. Thus high levels of mastery were associated with increased well-being and these findings support Hypothesis 2. People who reported low scores in the mastery aspect of resilience also demonstrated lower levels of well-being.

A significant negative relationship was found between the Well-being dimension and resilience as measured by the Relatedness scale [ $r = -.47$ ,  $n=50$ ,  $p<0.01$ ]. This suggests that



participants who reported experiencing positive relationships with others also demonstrated high levels of well-being. These results indicated that there was a significant positive relationship between well-being and resilience and thus offered support for Hypothesis 2.

Pearson's Correlations revealed a significant positive association between levels of well-being and the Reactivity scale of the Resiliency Scales [ $r = .48$ ,  $n=50$ ,  $p<0.01$ ]. This relationship indicated that people scoring within the high range on the Well-being dimension of the CORE-OM (thus indicating low levels of well-being) also scored highly on the Reactivity scale of the Resiliency Scales. High levels of emotional reactivity indicate increased vulnerability to risk of mental health problems and low levels of resilience. Thus people who reported prolonged periods of time to recover when distressed also demonstrated low levels of well-being in the current study. This finding supports the hypothesis that there will be a positive correlation between well-being and resilience whereby high levels of emotional resilience were related to increased well-being.

### **3.3.4 Hope and resilience**

**Hypothesis 3: There will be a significant positive relationship between hope and resilience.**

A significant positive correlation was found between hope and the Mastery Scale (a measure of resilience) [ $r = .60$ ,  $n=40$ ,  $p<0.01$ ] thus providing support for Hypothesis 3. The Mastery scale incorporates a sub-scale relating to optimism. There is therefore the potential for conceptual overlap, however, the limits of multicollinearity for multiple regression (.8; Field, 2009) were not violated. This significant relationship indicated that high levels of hope in

young people were associated with a strong sense of mastery and adaptability when faced with challenges or adversity.

Correlational analysis indicated that there was a significant positive relationship between hope and the Relatedness scale [ $r = .68$ ,  $n=40$ ,  $p<0.01$ ] and these findings also support Hypothesis 3. The Relatedness scale measures an aspect of resilience associated with feeling able to trust others and access support and comfort within relationships. Therefore young people who demonstrated hopefulness also reported feeling safe and supported within their relationships and felt able to ask for help when necessary.

The results of the analysis indicated a significant negative correlation with a small effect size between hope and Reactivity [ $r = -.28$ ,  $n=40$ ,  $p<0.05$ ] suggesting that young people who felt hopeful demonstrated lower levels of emotional reactivity and recovered from distress more quickly than those who were less hopeful. Therefore the hypothesis that there would be a positive relationship between hope and resilience in relation to reactivity was supported.

### **3.4 Multiple Regression**

A hierarchical multiple regression was conducted to evaluate the predictive power of hope on the psychological well-being of the sample in comparison to the Reactivity, Mastery and Relatedness scales of Resiliency. The mean total scores on the Well-being dimension of the CORE-OM were the dependent variable and mean total scores on the Comprehensive Hope scale and the three Resiliency scales were the predictor variables entered into the analysis blockwise. The rationale for entering hope into the model first was informed the studies of Park et al (2004a) who found that hope was strongly associated with life satisfaction in

adolescents and Toner et al (2012) who reported that hope was a strong predictor of well-being in young people. Three separate analyses were conducted in which each of the Resiliency scales was entered into the Regression model alone in addition to hope (see Tables 5-7). This was due to the high variable inter-correlations between hope and the Mastery and Relatedness Resiliency scales and also the small sample size whereby the Regression model could not have withstood more than two independent variables.

#### **3.4.1 Hope as a predictor of well-being**

**Hypothesis 4: There will be a positive association between hope and well-being, and hope will account for more of the variance in comparison to resilience.**

As shown in Tables 5, 6 and 7 the results of three separate hierarchical regressions indicated that hope accounted for 37.6% of the variance ( $\beta = .61$ ,  $p < .001$ ) on the Well-being dimension of the CORE-OM. Hope was the most significant predictor of well-being in comparison to the Resiliency scales and thus Hypothesis 4 was supported.

**Table 5:** Hope and Reactivity as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression

<b>Model</b>	<b>Predictor Variables</b>	<b>Standardised Coefficient B</b>	<b>Model Summary <math>\Delta R^2</math></b>
Step 1	Hope	-.61***	.376***
Step 2	Hope	-.52***	.099*
	Reactivity	.33*	

Dependent variable= Well-being dimension of the CORE-OM

\*\*\*Significant at  $p < .001$

\*Significant at  $p < .05$

**Table 6:** Hope and Mastery as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression

<b>Model</b>	<b>Predictor Variables</b>	<b>Standardised Coefficient B</b>	<b>Model Summary <math>\Delta R^2</math></b>
Step 1	Hope	-.61***	.376***
Step 2	Hope	-.47*	.036
	Mastery	.24	

Dependent variable= Well-being dimension of the CORE-OM

\*\*\*Significant at  $p < .001$

\*Significant at  $p < .05$

**Table 7:** Hope and Relatedness as predictors of well-being in 16 to 18 year olds: Results of Hierarchical Multiple Regression

Model	Predictor Variables	Standardised Coefficient B	Model Summary $\Delta R^2$
Step 1	Hope	-.61***	.376***
Step 2	Hope	-.55**	.005
	Relatedness	-.099	

Dependent variable= Well-being dimension of the CORE-OM

\*\*\*Significant at  $p < .001$

\*\* Significant at  $p < .01$

\*Significant at  $p < .05$

As indicated in Table 5, the inclusion of the Reactivity scale of the Resiliency Scales as a predictor in Model 2 accounted for an additional 9.9% of the variance in the measure of well-being whereby hope accounted for 37.6% of the variance ( $\beta = -.61$ ,  $p < .001$ ). Thus hope and Reactivity accounted for 47.5% of the variance in the well-being of the 16 to 18 year olds within this sample. The Reactivity scale ( $\beta = .33$ ,  $p < .05$ ) demonstrated a small but significant relationship with well-being when hope had been accounted for and was thus making a slight contribution to the well-being scores.

As shown in Table 6, the results of Model 2 of the hierarchical regression indicated that Mastery was not a significant predictor of well-being ( $\beta = .24$ ) and added only 3.6% to the variance within this model. The addition of the Relatedness scale added only 0.5% to the variance on well-being ( $\beta = -.10$ ) as shown in Table 7 and these findings taken together

suggested that resilience as measured by the three Resiliency scales in combination was not a significant predictor of well-being.

### **3.4.2 Secondary Analysis**

To confirm these findings, the analysis was re-run with each of the Resiliency scales entered first into the hierarchical model and with hope entered into the second block. The results of this secondary analysis revealed that although Mastery is a significant predictor of well-being ( $\beta = -.52, p < .001$ ), hope made a significant unique contribution to the model of 14.2% of the variance ( $\beta = -.47, p < .005$ ). Hope also made a significant unique contribution of 16.2% of the variance ( $\beta = -.55, p < .005$ ) in the model in which Relatedness was entered into the first block. The most significant finding was the model in which Reactivity was entered first into the hierarchical multiple regression. Results here indicated that Reactivity accounted for 22.6% of the variance in comparison to hope which accounted for 25% ( $\beta = -.52, p < .001$ ) and so they each accounted for a similar amount of the variance in relation to well-being.

### **3.4.3 Assessing Multicollinearity**

The coefficient values of the Pearson's correlations between the variables as shown in Table 4 indicated that the variables were strongly related but did not meet the accepted cut off for multicollinearity ( $< .8$ ; Field, 2009; Pallant, 2006). Myers (1990) indicates that variance inflation factors (VIF) above 10 would indicate collinearity issues and Field (2009) states that tolerance values below 0.1 indicate serious issues of multicollinearity. In relation to the Multiple Regression models shown in Tables 5, 6, and 7, the collinearity diagnostics

indicated that the VIF for each of these models was below 10 and exceeded the tolerance level of 0.1, thus indicating that multicollinearity was not an issue between the predictor variables of hope and resilience.

However, the results of the Multiple Regressions in which the Mastery (Table 6) and Relatedness (Table 7) scales of the Resiliency scales were included as predictors in Model 2 each demonstrated an average VIF which exceeded 1. This indicated that multicollinearity between each of these measures and the Hope scale may have biased the regression model (Bowerman & O'Connell, 1990). Therefore the findings in relation to the Mastery and Relatedness scales of resilience as a predictor of well-being must be treated with caution and cannot be generalised outside of the current sample.

#### **4.0 Discussion**

The transition from adolescence to adulthood is a time of challenges and adversity, and is associated with an increased risk of developing mental health problems (McGorry, 2011). However many young people demonstrate resilience, which was defined as “patterns of positive adaptation in the context of risk or adversity” (Masten & Powell, 2003, Cited in Luthar, 2003, p 4). Positive psychology was discussed in relation to its strengths-based approach to understanding resilience in adolescence (Carr, 2011) and its emphasis upon the role of hope in enhancing well-being (Scioli, 2007).

The aim of the current research was to contribute to the limited evidence base regarding well-being and resilience in adolescence (Daniel, 2005) in relation to the levels of hope for a sample of 16 to 18 year olds. This age group represents a time of ‘Emerging Adulthood’ (Arnett, 2004) and is also a ‘forgotten group’ (Kennedy, 2010) in terms of mental health service provision, and thus it was intended that this study might contribute to clinical practice regarding a positive psychology approach to enhancing the strengths and resources available to young people.

Section 4.1 of this chapter will discuss the findings of the current research in relation to the aims of the study and in conjunction with the review of the relevant literature. Section 4.2 will address the methodological considerations of the study in relation to the strengths and limitations of its design and methodology. The clinical implications regarding the findings will be discussed in relation to services for young people in section 4.3, and directions for future research will be introduced in section 4.4. The conclusion of the current research will be presented in section 4.5 of this discussion chapter.



#### **4.1 Summary of the findings**

Hope was significantly associated with well-being and resilience, and resilience was significantly associated with well-being in young people aged between the ages of 16 and 18 years. It was also found that hope was a significant predictor of well-being. There is a paucity of age-specific literature regarding well-being in young people (Dex & Hollingworth, 2012) and the transition between adolescence and early adulthood in particular (Kennedy, 2010) and thus these findings contribute to the limited evidence base within this field of research.

The results also indicated that there was a positive relationship between hope and resilience whereby high levels of mastery and relatedness were positively associated with hopefulness, and high levels of hope were associated with low levels of emotional reactivity. A strong relationship was found between well-being and resilience in that high levels of mastery and relatedness were associated with increased well-being, and positive well-being was related to low levels of emotional reactivity as measured by the Resiliency Scales.

A further aim of this research was to understand well-being in young people and potentially to make recommendations regarding service development to meet the needs of this group. The findings may indicate future directions for research regarding the well-being of adolescents and young adults, particularly in relation to hope.

#### **4.1.1 Summary of the findings in relation to the literature review**

As Kennedy (2010) states “Data in many areas of health and healthcare for children and young people is poor or non-existent” (Kennedy, 2010, Executive summary, p 11) and “Data relating to...children and young people,...and child and adolescent mental health services (CAMHS) must be generated, used for analysis and published” (Kennedy, 2010, Executive summary, p 11). Due to the limited data relating to the health and well-being of young people, particularly age specific data (Dex & Hollingworth, 2012), it is difficult to make direct comparisons to previous literature regarding hope and resilience in relation to the current findings from a study of the experiences of 16 to 18 year olds. Thus the discussion regarding the literature review will make broad comparisons of the evidence base regarding hope and resilience in relation to well-being and will focus on the findings as they apply specifically to the experiences of young people aged between 16 and 18 years.

The present study is novel in terms of the exploration of the relationships between hope, resilience and wellbeing during late adolescence. However, as can be seen from the Introduction, there are inconsistencies in how these constructs are defined and measured. The definitions utilised in this study are based on the work of Sciolli (2007), Luthar (2003) and Seligman (2011). Further work is required in terms of establishing consensus with regards to defining these aspects of positive psychological functioning.

#### **4.1.2 Hope and well-being**

Hypothesis 1 predicted that hope would be positively associated with well-being. The findings of the current study supported this hypothesis and a large effect size (Cohen, 1988) was observed. The results indicated that high levels of hope were associated with increased

levels of well-being. This replicates previous results with a sample of University students (Shorey et al, 2007) which indicated that hope was associated with psychological well-being. Chang (2003) reported that hopeful adults demonstrated increased life satisfaction and these findings were supported by Park and Peterson's (2006) study with adolescents. In his earlier work, Seligman (2002) utilised life satisfaction as a measure of happiness which was later developed into a theory of well-being (Seligman, 2011). The findings of the current study are consistent with Park and Peterson's (2006) findings regarding the relationship between hope and well-being in an adolescent population. However, these studies utilised different measures and definitions of the constructs of hope, well-being, and life satisfaction thus representing cross-study variation (Olsson et al, 2003) and leading to the potential for confusion regarding the relationship between hope and well-being.

Hypothesis 4 was examined by use of hierarchical multiple regression in relation to the role of hope on the well-being of the study sample. It was predicted that hope would account for more of the variance than resilience in relation to well-being and this hypothesis was supported. The results indicated that hope was accounting for 37.6% of the variance and was making a unique contribution to the model over and above that of resilience in relation to the well-being of the sample of 16 to 18 year olds. Thus the current study supported the findings of Toner et al (2012) that hope was a significant predictor of well-being in young people. As discussed previously, Kirshman et al (2009) report that strengths such as hope and optimism enable young people to 'flourish' as they enter adulthood. Thus the current study in conjunction with previous research has implications for developing clinical practice. Hope could be used to promote well-being (Scioli, 2007) in young people. These findings also support the assertion made by Burrow et al (2010) whereby further exploration of the role of hope would enhance understanding of factors that promote positive youth development and resilience.

### **4.1.3 Well-being and resilience**

Hypothesis 2 predicted that there would be an association between well-being and the three Resiliency Scales, the sense of Mastery scale, the sense of Relatedness scale and the Reactivity scale. The findings supported these hypotheses indicating that the constructs of resilience and well-being are related. The results showed that high levels of Mastery and Relatedness were associated with increased well-being.

A statistically significant relationship was found between well-being and the Reactivity scale of the Resiliency Scales whereby young people reporting high levels of emotional reactions to stressful situations demonstrated reduced well-being. As reported in the Introduction chapter, the Adult Psychiatric Morbidity Study (McManus et al, 2009) indicated that 13% of males and 22% of females between the ages of 16 and 24 years demonstrated mental health problems related to mood disorders such as anxiety and depression, common mental health difficulties which are associated with emotional reactivity (Davidson, 2000).

A surprising finding in the current study was that 36% of the total sample exceeded the clinical cut-off scores on the CORE-OM Well-being dimension. Therefore, the current study is consistent with previous research by UNICEF (2007) which highlighted concerns regarding the well-being of our young people. The CORE-OM has been utilised with clinical and non-clinical samples aged between 18 and 24 years (Connell, Barkham, Stiles, Singleton, Evans & Miles, 2007) but comparable published research specific to 16 to 18 year olds has not been reported to date. It must be recognised that the majority of this sample reported non-clinical levels of well-being as measured by the CORE-OM Well-being dimension and thus appeared to be adapting to the transition from adolescence without significant problems (Burke et al, 2010).

#### **4.1.4 Hope and resilience**

The findings in the current study revealed a highly significant positive relationship between hope and the Mastery scale of the Resiliency scales. The Mastery scale incorporates a sub-scale relating to optimism which may be associated with elements of Scioli's (2007) theory of Hope-based mastery. This relates to the individual's beliefs that they can achieve their goals and become "The Empowered Self". This overlapping element between the constructs of hope and mastery may explain the strength of the association between these variables. However, resilience-based mastery also includes adaptability, which is the ability to accept mistakes and ask for help, and to demonstrate flexibility in response to changes in plans (Prince-Embury, 2010). Thus there are differences between the conceptualisation of these constructs.

The relationship between hope and mastery reported in the current study is consistent with Scioli's (2007) description of hope as a protective factor in relation to resilience. This strong relationship also appears to support the findings of Rand and Cheavens (2009) whereby high levels of hope were associated with increased psychological adjustment in relation to adversity and thus may be related to elements of mastery and adaptability.

A strong positive relationship was found between hope and the Relatedness scale of the Resiliency scales, which might provide support for "The Resilient Self" (Scioli, 2007) in which the person recognises that another person cares about their well-being and thus they are able to seek help in times of stress and adversity. The Relatedness scale also measures an aspect of resilience associated with trust within attachment relationships. The findings of the current study suggest that a sense of attachment to others is related to increased levels of

hopefulness and thus may support Scioli's (2007) theory of hope in relation to the 'Attached Self'. Scioli (2007) reports that the attachment relationship experienced in childhood guides the person's ability to trust others in future relationships as described in Erikson's (1968) theory of psychosocial development.

There was also a significant association between hope and Reactivity, although this relationship was weaker than that between the two Resiliency Scales and the Hope scale. Low levels of emotional reactivity were related to increased levels of well-being. The overall findings of the current study in relation to hope and well-being in adolescents supports the conclusions of Lazarus (2003) whereby hope is a concept that integrates elements of positive psychology and traditional clinical psychology in relation to adversity, mental health, and well-being.

## **4.2. Strengths and limitations of the current study**

### **4.2.1 Methodological considerations**

#### **4.2.2 Design**

The cross-sectional design of this study captured the experiences of a specific group of 16 to 18 year olds at a particular time point in their lives and thus the findings may not be directly comparable to the experiences of other young people within this age group (Coolican, 1999). The results generated may have been affected by a number of extraneous variables, for example, exam stress or personal circumstances, which may have confounded results. The

findings of this study may have been different if the research had been conducted at a different time point. Thus a limitation of the current research was that there may be a risk that the findings are not generalisable beyond this limited sample of college students. However, the results of the study offer some insights into the experiences of these young people and may provide a foundation for future longitudinal and experimental research and theory building in this area.

As with cross-sectional design, there may be other measured or unmeasured variables affecting the results of the correlational analysis and thus causality cannot be assumed (Field, 2009). The data were analysed using correlational analysis and thus it was not possible to imply direction of causality as correlation coefficients do not identify which variable causes a change in another variable (Field, 2009). Therefore another limitation of the current study is that, although a relationship was found between the variables, the findings can be interpreted in various ways, for example is hope influencing resilience or is resilience influencing hope.

Structural equation modelling is a powerful multivariate analysis technique utilised as confirmatory analysis and to assess the 'goodness of fit' of a model in relation to the study data. Causal modelling or path analysis assesses the causal relationship among variables using a linear equation model and this technique could be applied to future research to elucidate further information regarding the direction of relationships between the variables and to inform future experimental research. However, due to the limitations of the current study and the small sample size this was not possible.

The data were analysed using Multiple Regression, which offers a more sophisticated analysis allowing conclusions to be drawn regarding the unique contribution of one variable in comparison to others. The results of the current study indicated that hope was a significant predictor of well-being and accounted for more of the variance compared with measures of resilience. Further analysis supported the findings in that hope made a significant unique contribution to well-being when the Mastery and Relatedness measures of resilience were entered in to the model first. However hope accounted for only slightly more of the variance of well-being in comparison to the Reactivity measure of resilience.

It is recognised that there was a high level of inter-correlation between the variables of hope and Relatedness but that this did not violate multicollinearity (Field, 2009). The literature regarding Scioli's (2007) multi-faceted theory of hope highlighted the development of trust and openness in relationships with key attachment figures during childhood, leading to emergence of 'the Attached Self'. Social relationships are a key factor in many aspects of our mental health, well-being, and resilience (Masten et al, 2009) and therefore it is understandable that the concepts of attachment and relatedness are highly related to a sense of hope and other positive psychological constructs.

However, there were concerns regarding multicollinearity between the resilience variables of Mastery and Relatedness in relation to hope which may have undermined the Multiple Regression model (Bowerman & O'Connell, 1990). Thus it is imperative that the findings of the current study in relation to Mastery and Relatedness as predictors of well-being must be treated with caution. Multicollinearity and high inter-correlations between the variables of hope, Mastery and Relatedness may be explained by characteristics shared by each of these constructs (Youseff & Luthans, 2007).



Seligman and Csikszentmihalyi (2000) stated that well-being can be improved by enhancing the psychological strengths of hope, resiliency and mastery. The current study explored these positive psychological characteristics in relation to the well-being of young people aged 16 to 18 years. It is recognised that there is an overlap between the 'positive' constructs measured within this study and that positive relationships and mastery are inherent to Scioli's (2007) theory of hope, protective factors within resilience (Masten et al, 2009) and Seligman's (2011) Well-being theory. Thus the similarities between the constructs may have impacted upon the results and conclusions that can be drawn from the current research. The lack of definition and clarity regarding these psychological constructs has led to much confusion within the evidence base, for example, within research regarding resilience (Evans & Pinnock, 2007).

The constructs of hope and resilience are theoretically linked but are distinct in terms of their foundations and evidence base within the positive psychology model. For example, according to Synder's theory (2000) of hope, which was later expanded upon by Scioli (2007), there is a strong element of agency and motivation in one's pursuit of goals, whereas within resilience theory, risks and challenges that may negatively impact on even a hopeful person, present opportunities to adapt and 'bounce back' (Youseff & Luthans, 2007). Resilience represents the interplay between risk and protective factors (including hope and relationships) in managing adversity whereas hope is a future-oriented, active pursuit of goals. According to Lazarus (2003), hope incorporates aspects of positive psychology and clinical psychology in terms of stress and adversity, mental health and well-being. These distinct factors have been encapsulated within Scioli's (2007) multi-dimensional theory of hope and are measured as separate dimensions within the Comprehensive Hope Scales.

#### **4.2.2.1 Selection of measures**

A strength of the current study is that the research measures were selected to reflect a holistic approach to understanding the experiences of young people that incorporated both their resources and difficulties in a non-blaming style as recommended by Luthar and Zelazo (2003). The scales were selected as they were validated for use with young people over the age of 16, recognising the increased cognitive development of this age group and the transition to adulthood. Each scale was validated for use with clinical and non-clinical populations and so they were all appropriate for the design of the current research.

The three Resiliency Scales (Prince-Embury, 2007) and the Comprehensive Hope Scale (Scioli, 2010) utilised within this research all demonstrated excellent levels of internal consistency with the current sample and this represents a strength of the current research in relation to the findings regarding hope and resilience in 16 to 18 year olds.

The CORE-OM is a measure widely used in clinical practice (Barkham et al, 2001) and had previously been recommended for use with this age group by CAMHS Outcome Research Consortium (CORC). The individual dimensions of the CORE-OM demonstrated acceptable levels of internal consistency with non-clinical populations (Sinclair et al, 2005). However, the Well-being dimension demonstrated less than acceptable internal consistency within the current sample thus it may not be possible to generalise the significant findings of the current study beyond this small sample of college students. Cronbach alpha values are generally quite low in relation to scales with fewer than ten items (Pallant, 2006) and the scale quality of the four-item Well-being dimension was also reported to be poor (Lyne, Barrett, Evans & Barkham, 2006).

The selection of the Well-being dimension of the CORE-OM as a reliable measure of well-being in 16 to 18 year olds is a major limitation of the current research. It is recommended that a standardised, reliable and valid measure of well-being is developed for use within future research specifically involving young people. Dodge et al (2012) have developed a new well-being questionnaire with the help of a focus group of 16 to 18 year olds which is currently being applied in a college setting. At the time of writing there is no further information available regarding this study. However, there are other well-being measures, for example the BBC Well-being scale (Kinderman et al, 2011) which has been recommended for use with research and clinical populations and which may be suitable for use with young people.

#### **4.2.2.2 Sample size**

The results of the current study are significant but they must be interpreted with caution as the small sample size limits the generalisability of the findings. The apparent homogeneity of the sample in terms of the high percentages of participants who were white British, living at home with their parent (s), and attending college may also limit the generalisability of the findings. Approximately 90% of the participants were living with parent(s) and attending college. Therefore they may have substantial protective factors in relation to family relationships and intelligence (Garmezy & Rutter, 1983) in comparison with other groups. Thus the sample used in the present study does not represent the general population with respect to these factors. Despite these limitations, the results are encouraging in terms of directing future research with a larger, more diverse sample of 16 to 18 year olds.

**4.2.2.3 Removal of CAMHS data**

The original aim of the research was to conduct a group comparison on measures of well-being, resiliency, and hope, and thus compare the scores of young people aged 16 to 18 who had been referred to the specialist adolescent mental health teams with the scores of a group of 16 to 18 year olds attending a college in the local area. Due to major service restructure within the NHS, only a small number (n=15) of 16 to 18 year olds were recruited from the specialist mental health service. In line with the original recruitment procedure (Appendix XIV), developed in collaboration with CAMHS clinicians, young people attending the service were recruited to the study within up to three clinical sessions to reduce the risk of disengagement with CAMHS services. The CORE-OM was completed as part of the standard service outcome measures at the point of intake to the CAMHS service and, with client consent, these data were to be used in the current research to reduce repetition and time demands on the clinical sample. However, the Well-being dimension was completed at a different time point to the hope and resilience measures. Thus it was necessary to remove the clinical data from the analysis as the results were likely to have been confounded by extraneous variables.

Despite these limitations, a group comparison of the levels of hope, resilience and well-being between clinical and non-clinical samples of 16 to 18 year olds is recommended to add further valuable information to the evidence base and to inform clinical interventions in targeted services for young people in this age range. This may facilitate an understanding of the potential differences between clinical and non-clinical matched groups in relation to positive psychological factors. Thus, if a difference is found, aspects of hope and resilience can be engendered in those with mental health difficulties to aid their recovery and prevent relapse.

#### **4.2.2.4 Missing data**

There were no missing data on the Relatedness Scale of the Resiliency Scales which suggested that this was the most acceptable measure utilised within the study. Interestingly the Relatedness scale is related to the principle protective factor in young people, that of a secure attachment relationship with another person (Masten et al, 2009).

A significant limitation of the study was that data were missing in relation to the Comprehensive Hope Scale (Scioli, 2010) and due to the small sample size, the missing data impacted upon the analysis and the study findings. Eight participants did not complete items 20 to 28 on the Comprehensive Hope Scale (Scioli, 2010), which were printed overleaf on the measure and it is thought that they did not turn the page thus resulting in a significant amount of missing data for this scale. As none of these participants had missed any other items, and the remaining participants in the sample had not missed a single item on the Hope Scale, it is assumed that the measure was generally acceptable. Two participants did not complete any items on the scale and, as this was the last questionnaire to be completed in the research pack, it is possible that fatigue effects may also have contributed to the missing data on this measure. Therefore, in hindsight it would have been beneficial if the order of the measures was altered in future research so that this became the first measure in the research pack, and was printed on two single pages.

In relation to the missing data, analyses were conducted to maximise the data that were available and thus the pairwise deletion method was used within SPSS for Windows. There were disadvantages in using this method, such as the varied sample size within the

correlation matrix, but followed the recommendations made by Allison (2000) that only complete data for pairs of correlated variables were used for regression analyses.

#### **4.2.2.5. Strengths of the current study**

The current study was grounded in established psychological theories of hope, resilience, and well-being within the rapidly developing field of positive psychology. These theories were then applied to study the experiences of a sample of 16 to 18 year olds, who have been described by Kennedy (2010) as a ‘forgotten group’ in terms of mental health services. A key strength of this study was its contribution to the evidence base regarding the well-being of young people where there is a paucity of age-specific research evidence (Dex & Hollingworth, 2012).

Therefore this study offered an insight into their thoughts, feelings and experiences and was timely in terms of government policies to measure the well-being of the nation (Layard, 2010). The main aim of this study was to bring awareness to the experiences of these young people as they negotiate the potentially challenging transition to adulthood, and to focus on their strengths and resources within a positive psychology framework so as to offer opportunities to support their development. The findings of this study also contribute to the literature regarding adolescence as a time of transition to ‘emerging adulthood’ (Arnett, 2004) and this is an area that has previously been neglected (Coleman, 2011).

Another strength of the current research was the participation of a number of young people in the design and development of the research protocol. The researcher incorporated the

recommendations of key government policy regarding the participation of young people in the development of age appropriate services (Department of Health, 2010a) and sought the input of young people aged 16 to 18 in relation to the selection of measures and research procedure to ensure that the study was accessible to potential participants. The contribution of the students who participated in the pilot study was valuable and their views regarding the study were incorporated into the procedure where possible. The researcher demonstrated their appreciation of the time invested by the A Level Psychology students in developing the posters to advertise the project and thus enhance recruitment by delivering a talk regarding a career in clinical psychology and reflecting upon the experience of conducting independent research.

#### **4.3 Clinical implications**

Although the findings of the current study must be interpreted with caution, they also indicate that hope is an important factor in the well-being of young people and this reflects the findings of previous research within the field of positive psychology with adults. Positive psychology recommends the use of strengths-based psychological interventions (Carr, 2011) and the results of the current study, although needing to be replicated, suggest the potential value of therapeutic interventions based upon enhancing the resources of hope and resilience in young people between the ages of 16 and 18 years. The current research is congruent with the Government's policy to promote the mental health and well-being of the nation with a particular focus on the needs and resources of young people. There are also clear implications regarding the importance of appropriate needs-led services for young people making the transition to early adulthood as identified by Kennedy (2010).

Therefore it is recommended that clinicians working with young people who have been referred to mental health services ensure that they incorporate questions in to their assessment interview to elicit the strengths and resources available to the young person and not to focus solely on the problems and deficits (Coleman, 2011). These positive psychological factors should also be incorporated into the psychological formulation in a creative and collaborative style and reflected upon within the therapeutic relationship. The importance of working towards the person's own goals and values is implicated in relation to the literature regarding goal-based hope (Syder, 2002) and thus can be incorporated into existing clinical practice in relation to any therapeutic modality within the holistic theory of hope proposed by Scioli (2007). Within this the Comprehensive Hope Scale (2010) might be used as part of the assessment, or as an outcome measure (Scioli et al, 2011) to ascertain whether the intervention has been successful in increasing the person's level of hope.

Previous research has indicated the utility of the Penn Resiliency Program (Gilham et al, 2008) which was adapted for use within the UK (Challen et al, 2011). Clinical Psychologists are encouraged to become involved in adapting this programme for implementation with young people aged 16 to 18 years to be delivered within the college curriculum and also to evaluate its effectiveness in promoting resilience. This seems particularly important in relation to the Government's plan to increase the age of compulsory education to 17 in 2013, and 18 in 2015. Thus those at greatest risk of developing mental health problems will be able to access a potentially beneficial intervention within an educational establishment. Within their role as a Clinical Psychologist, it is suggested that clinicians deliver training to the college tutors who would deliver the programme and subsequently offer regular clinical supervision and feedback sessions to the tutors to ensure treatment fidelity. Clinicians are invited to evaluate the programme in relation to established measures of hope, resilience and well-being and to share the outcomes with the Government to inform and guide their



agenda on measuring and promoting the well-being of young people as part of their audit of the 'Positive for Youth' policy (H M Government, 2011a).

Hope is an important factor in recovery from mental health problems (Hobbs & Baker, 2012). It is possible that Sciolì's (2007) work can inform clinical practice via the development of interventions that draw on the core elements of hope theory, for example therapy to enhance a sense of mastery and optimism from which the 'Resilient Self' emerges. Sciolì and Biller (2009) defined this in terms of the capacity to remain hopeful in times of stress. Research regarding both risk and protective factors within the resilience paradigm could inform family therapy and enhance parenting styles and family relationships thus providing a secure foundation for young people to make the transition to early adulthood. The current research indicates that 36% of the young people in the sample scored above the clinical cut-off for well-being on the CORE Well-being dimension. Therefore an effective intervention that enhances their feelings of hope and resilience and thus their mental health and well-being seems vital. Society must be mindful not to blame young people who are experiencing distress in the face of adversity (Luthar & Zelazo, 2003) and a therapeutic intervention that enhances hope appears to complement traditional clinical psychology whilst incorporating facets of positive psychology (Seligman & Csikszentmihalyi, 2000).

Despite its limitations and small scale, the current study reflects the strengths-based approach to working with young people. The young people involved in the current study demonstrated their willingness and capability to offer valuable contributions and to dedicate their time and effort. It is recommended that ecological systems around the young person (Bronfenbrenner, 1979), such as education, community, and health services work to actively involve young people in decision making processes that impact upon them and to utilise their skills and resources. It is hoped that the views of young people between the ages of 16 to 18

will be considered by the Government and the NHS as they make significant changes to the services available to young people at a potentially challenging time of transition to adulthood, and to focus on ways to improve engagement with mental health services by listening to the views of Participation groups.

#### **4.4 Directions for future research**

The original research design regarding a group comparison of a clinical sample of 16 to 18 years olds with a non-clinical sample recruited from the general population remains to be completed and may offer valuable insights into the mental health and well-being of young people. A comparison of their scores on measures of hope and resilience in relation to well-being to the scores of young people in the general population may clarify clinical implications for interventions and for service development in adolescent mental health services. In order for this group comparison to be possible the limitations of the current study would need to be addressed in terms of recruitment of a larger number of participants to both the clinical and general population sample to enable Multiple Regression analysis of the data and Structural Equation Modelling.

As the current research indicated that hope is a predictor of well-being in young people, it is recommended that future research focus on exploring the nature of this relationship between hope and well-being. Correlational analysis does not indicate causality or directionality and these factors need to be established so that therapeutic interventions can be developed to improve the well-being of young people (Daniel, 2005). Thus it is recommended that Structural Equation Modelling is applied to assess causality between variables, although this method also has its limitations.

The literature indicates that there are gender differences in terms of mental health difficulties in young people aged between 16 and 24 years whereby there is a significantly higher incidence of mood disorders and eating disorders in females as compared with males (McManus et al, 2009). It may be beneficial for future research to expand the age group of the current study to include 16 to 24 year olds. This would reflect societal changes regarding the concept of 'emerging adulthood' (Arnett, 2004) in relation to hope, resilience and well-being. Although the evidence base suggests that there is not a significant difference between males and females in measures of hope, resilience, and well-being (Carr, 2011), this may be an area for further research in relation to the mental health and well-being of adolescents. This was beyond the scope of the current study in which there was also the issue of gender imbalance within the research sample whereby there were more male than female participants.

Future research is also recommended in terms of the well-being of 16 to 18 year olds who are categorised as NEET. It is recognised that the current sample was homogenous and thus the study design could be repeated with other samples, for example, to examine the relevance of ethnic diversity.

It is recommended that standardised measures of resilience, hope and well-being are established for use with samples of adolescents between the ages of 16 and 18 years and that definitions of these constructs are operationalised to enable further development of the evidence base. Cross-study variation in relation to studies of adolescent resilience has led to confusion (Olsson et al, 2003) and it is important that these issues are rectified to enable progression in adolescent research within the context of positive psychology.

The majority of studies regarding resilience have utilised quantitative methodology (Ungar & Liebenberg, 2011). It would be interesting to undertake a qualitative study, for example, using an Interpretative Phenomenological Approach (IPA; Smith, 1996) to develop a deeper understanding of the experiences of young people aged 16 to 18 in their own words and with the opportunity to explore the meaning they attach to these experiences. Reid, Flowers and Larkin (2005) report that IPA research can enable participants to discuss their strengths and well-being within the context of positive psychology and would thus be congruent with the aims of the current study. This approach may also represent participation and service user involvement in relation to the development of age appropriate services for young people.

Ungar and Liebenberg (2011) recommend the use of mixed methodology in relation to research into resilience and developed the Child and Youth Resilience measure (Ungar & Liebenberg, 2011). This measure is culturally relevant and sensitive to context-specific adversity, such as that experienced in developing countries. It recognises cultural diversity and situational factors and thus overcomes some of the criticisms of the current research, and resilience research in general. The benefit of mixed methodology is that it captures both the generic and unique aspects of the construct of resilience (Ungar & Liebenberg, 2011) thus maximising the available data and offering rich insights into individual life experiences. A mixed-method approach increases the potential for novel findings that enhance our understanding of resilience in relation to the experiences of 16 to 18 year olds. The Child and Youth Resilience Measure (Ungar & Liebenberg, 2011) is also only 28 items long and thus reduces the possibility for fatigue effects that may have contributed to missing data in the current study. Therefore suggestions for future research evolving from this study include the use of a mixed method design utilising the Comprehensive Hope Scale (Scioli, 2010), the Child and Youth Resilience Measure (Ungar & Liebenberg, 2011) and a measure of well-being such as that developed by Dodge et al (2012). Thus it is hoped that the limitations of the current research will be rectified and the findings replicated using reliable measures.

#### **4.5 Conclusion**

Adolescence is a time of significant psychological readjustment in which numerous biological, cognitive and psychosocial developments occur. Traditionally it has been viewed as a time of 'storm and stress' (Hall, 1904, cited in Savage, 2007) but recent literature indicates that most young people adapt without significant difficulties (Burke et al, 2010). Despite the importance of this transition to adulthood, there is a paucity of research regarding resilience in adolescence (Olsson et al, 2003) and more data regarding the mental health (Kennedy, 2010) and well-being of young people (Dex & Hollingworth, 2012) is required. The current study aimed to address the significant gaps in the literature and to adopt a positive psychology approach (Seligman & Csikszentmihalyi, 2000) to focus on the strengths and resources available to young people within the Positive Youth Development paradigm (Lerner, 2009).

The aim of the study was to explore the role of hope and resilience in relation to the well-being of young people aged between 16 and 18 years as they negotiated the transition to adulthood. It was also intended that the findings would enhance the evidence base regarding well-being in late adolescence and inform mental health service delivery for young people in relation to positive psychological factors. This research was based on established theories of hope (Scioli, 2007), resilience (Luthar, 2003), and well-being (Seligman, 2011) within the field of positive psychology and as applied to a sample of 16 to 18 year olds attending college in a particular area of the North West of England.

The significant findings indicated that within this population high levels of hope were related to increased well-being, and that hope was also a significant predictor of the well-being of

young people. Significant relationships were also found between hope and elements of resilience, such as the importance of mastery and success, relationships and trust, and low levels of emotional vulnerability. There was a strong association between resilience and well-being whereby a sense of mastery and relatedness was associated with increased well-being. Due to the limitations of this study, the findings must be interpreted with caution and were not readily generalisable. However, the results may indicate a potential therapeutic benefit of clinicians incorporating a strengths-based approach to psychological assessment, formulation, and intervention, and which draws upon Scioli's (2007) multi-faceted theory of hope to enhance the well-being and resilience of young people. The overall findings of the current study reflect the conclusions of Lazarus (2003) whereby hope integrates aspects of both positive psychology and traditional clinical psychology in relation to adversity, mental health, and well-being, as applied to the varied experiences of young people.

The findings indicated ideas for future research in relation to young people emerging into adulthood and the value of hope and resilience in the potential to reduce their mental health difficulties and enhance well-being. The replication of the current study utilising a more heterogeneous sample of young people aged 16 to 18 was recommended with the aim of contributing generalisable findings. Further recommendations were made to explore the relationship between hope and well-being in order to understand the mechanisms involved and to develop effective therapeutic interventions to enhance the well-being of young people (Daniel, 2005).

The research was timely in relation to current Government policy to improve the mental health and well-being of young people between the age of 16 and 18 years (H M Government, 2011a). As highlighted by Kennedy (2010) adolescents represent "a 'forgotten group', caught between child and adult" (Kennedy, 2010, p38) and it is time that society

recognised their strengths and encouraged young people to participate in the design of services so as to meet their needs (Young Minds, 2005). Thus the conclusion of this study epitomizes that of Luthar (2003, p 545) who states, "Let us invest wisely in the future of today's youth".

### **5.0 References**

Allison, P. D. (2000). *Missing Data*. California: Sage Publications.

Alsaker, F. & Flammer, A. (2006). Pubertal maturation. In Jackson, S. & Goosens, L. (2006).  
(Eds) *Handbook of adolescent development*. Hove: Psychology Press Ltd

Anderson, P., Jane-Lopis, E., & Cooper, C. (2011). The imperative of well-being.  
*Stress and Health*, 27, 353-355.

Arnett, J.J. (2000). Emerging Adulthood. *American Psychologist*, 55 (5), 496-480.

Arnett, J.J. (2001). Conceptions of the transition to adulthood: Perspectives from  
adolescence to midlife. *Journal of Adult Development*, 8, 133-143.

Arnett, J.J. (2004). *Emerging adulthood: The winding road from the late teens through the  
twenties*. Oxford: Oxford University Press.

Arnett, J.J., Kloep, M., Hendry, L.B., & Tanner, J. L. (2011). *Debating emerging adulthood:  
Stage or process?* Oxford: Oxford University Press.



Arnett, J. J., & Taber, S. (1994). Adolescence terminable and interminable:

When does adolescence end? *Journal of Youth and Adolescence*, 23, 517-538.

Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., Evans, C., Benson, L.,

Connell, J., Audin, K., & McGrath, G. (2001). Service profiling and outcomes

benchmarking using the CORE-OM: Towards practice-based evidence in

psychological therapies. *Journal of Consulting and Clinical Psychology*, 69, 184-196.

Bentall, R. P. (2003). *Madness explained*. London: Penguin Books.

Bowerman, B. L., & O'Connell, R. T. (1990). *Linear statistical models: An applied approach*.

California: Duxbury.

Bronfenbrenner, U. (1979). *Ecology of human development*.

Cambridge: Harvard University Press.

Burke, K., Brennan, L., & Roney, S. (2010). A randomised control trial of the efficacy of the

ABCD Parenting Young Adolescents Program: Rationale and methodology.

*Child and Adolescent Psychiatry and Mental Health*, 4, 22.

Burrow, A. L., O'Dell, A. C., & Hill, P. L. (2010). Profiles of developmental asset:

Youth purpose as a context for hope and well-being.

*Journal of Youth and Adolescence*, 39, 1265-1273.

Bynner, J. (2001). Childhood risks and protective factors in social exclusion.

*Children and Society*, 15, 285-301.

Carr, A. (2011). *Positive Psychology: The Science of Happiness and Human Strengths*.

*Second Edition*. Hove: Brunner-Routledge.

Carver, C. S., Scheier, M. F., & Segerstrom, S. C. (2010). Optimism. *Clinical Psychology*

*Review*, 30, 879-889.

Challen, A., Noden, P., West, A. & Machin, S. (2011). *UK Resilience Programme Evaluation:*

*Final Report*. Department for Education Research Report No. 97.

Chang, E. C. (2003). A critical appraisal and extension of hope theory in middle-aged men  
and women: Is it important to distinguish agency and pathways components?

*Journal of Social and Clinical Psychology*, 22, 121-143.

Cohen, J., (1988). *Statistical power analysis for the behavioural sciences*. (Second Edition).

New Jersey: Lawrence Earlbaum Associates.

Coleman, J. (2011). *The Nature of Adolescence. Fourth Edition*. London: Routledge.

Coleman, J. & Hagel, A. (Eds) (2007). *Adolescence, Risk and Resilience:*

*Against the Odds*. Chichester: John Wiley & Sons Ltd.

Coles, B. (1996). *Youth and social policy*. London: UCL Press.

Collishaw, S., Maughan, B., Goodman, R., & Pickles, A. (2004). Time trends in adolescent mental health. *Journal of Clinical Psychology and Psychiatry*, 45, 1350-1362.

Compton, W. C., & Hoffman, E. (2012). *Positive Psychology: The Science of happiness and flourishing. International Edition*. United Kingdom: Cengage Learning.

Connell, J., Barkham, M., Stiles, W. B., Twigg, E., Singleton, N., Evans, O., & Miles, J. N. V. (2007). Distribution of CORE-OM scores in a general population, clinical cut-off points and comparison with the CIS-R. *The British Journal of Psychiatry*, 190, 69-74.

Coolican, H. (1999). *Research Methods and Statistics in Psychology. Third Edition*. London: Hodder & Stoughton.

CORE System Group (1998). *CORE System (Information Management) Handbook*. Leeds: CORE System Group.

Cote, J. E., & Bynner, J. (2008). Changes in the transition to adulthood in the UK and

Canada: The role of structure and agency in emerging adulthood.

*Journal of Youth Studies*, 11, 251-268.

Daniel, B. (2005). Resilience: A Framework of Positive Practice. *Research Findings*, 5.

Davidson, R. J. (2000). Affective style, psychopathology, and resilience: Brain mechanisms and plasticity. *American Psychologist*, 55 (11), 1196-1214.

Department of Health. (2010a). *Achieving equity and excellence for children and young people*. London: HMSO.

Department of Health. (2010b). *New Horizons- Confident communities, brighter futures: A framework for developing well-being*. London: HMSO.

Department of Health. (2011). *'You're Welcome': Quality criteria for young people friendly health services*. London: HMSO.

Dex, S. & Hollingworth, K. (2012). *Children and young people's voices on their wellbeing*. Childhood Wellbeing Research Centre: Working paper No.16.

Dishion, T. J., Nelson, S. E., & Kavanagh, K. (2003). The family check-up with high-risk young adolescents: Preventing early-onset substance use by parent monitoring,

*Behavior Therapy*, 34, 553-571.

Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing.

*Journal of Well-being*, 2(3), 222-235.

Eckersley, R. (2011). Troubled youth: An island of misery in an ocean of happiness, or the tip of the iceberg of suffering. *Early Intervention in Psychiatry*, 5 (1), 6-11.

Elkind, D., & Bowen, R. (1979). Imaginary audience behaviour in children and adolescents.

*Developmental Psychology*, 15, 38-44.

Erikson, E. H. (1959). *Identity and the life cycle*. London: Norton.

Erikson, E. H. (1964). *Insight and responsibility*. London: Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis*. London: Norton.

Evans, C., Connell, J., Barkham, M., Margison, F., Mellor-Clark, J., McGrath, G., & Audin, K.

(2002). Towards a standardised brief outcome measure: Psychometric properties and utility of the CORE-OM. *British Journal of Psychiatry*, 180, 51-60.

Evans, R., & Pinnock, K. (2007). Promoting resilience and protective factors in the Children's Fund. *Journal of Children and Poverty*, 13, 21-32.

Feldman, D. B., & Snyder, C. R. (2005). Hope and the meaningful life: Theoretical and empirical associations between goal-directed thinking and life-meaning. *Journal of Social and Clinical Psychology*, 24, 401-424.

Fergusson, D., & Horwood, L. (2003). Resilience to childhood adversity: results of a 21 year study. In Luthar, S. (2003). (Ed.) *Resilience and vulnerability*. Cambridge: Cambridge University Press.

Field, A. (2009). *Discovering statistics using SPSS for Windows. Third Edition*. London: Sage.

Fincham, S. D., & Beach, S. R. H. (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family*, 72, 630-649.

Foresight for Government Office for Science. (2008). *Mental Capacity and Wellbeing: Making the most of ourselves in the 21<sup>st</sup> century*. [www.foresight.gov.uk](http://www.foresight.gov.uk)

Freud, S. (1937). The ego and mechanisms of defence. In Coleman, J. (2011). *The Nature of Adolescence. Fourth Edition*. London: Routledge.

Garmezy, N., & Rutter, M. (1983). *Stress, coping, and development in children*.

New York: McGraw-Hill.

Gibbs, S. J., Fergusson, D. M., Horward, L. J. (2010). Burden of psychiatric disorder in young adulthood and life outcomes at age 30. *British Journal of Psychiatry*, 197, 122-127.

Gillham, J., & Reivich, K. (2004). Cultivating optimism in childhood and adolescence. *Annals of the American Academy of Political and Social Science*, 591, 146-163.

Gillham, J. E., Brunwasser, S. M., Freres, D. R., Abela, J. R. Z. & Hankin, B. L. (2008). Preventing depression in early adolescence: The Penn Resiliency Program. In Carr, A. (2011). *Positive Psychology: The Science of Happiness and Human Strengths. Second Edition*. Hove: Brunner-Routledge.

Grant, J. E., & Potenza, M. N. (2009). *Young adult mental health*. Oxford: Oxford University Press.

Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2005). *Mental health of children and adolescents in Great Britain, 2004*. London: Office for National Statistics, Stationery Office.

Hall, G. S. (1904). *Adolescence*. In Savage, J. (2007). *Teenage: The creation of youth 1875-1945*. London: Chatto and Windus.

Hampshire, A., & Di Nicola, K. (2011). What's worrying young Australians and where do they go for advice and support? Policy and practice implications for their well-being. *Early Intervention in Psychiatry*, 5 (1), 12-16.

Hendry, L. B. & Kloep, M. (2010). How universal is emerging adulthood? *Journal of Youth Studies*, 13 (2), 169-179.

Hendry, L. B. & Kloep, M. (2012). *Adolescence and adulthood: Transitions and transformations*. Hampshire: Palgrave Macmillan.

H M Government. (2011a). *Positive for Youth*. London: HMSO.

H M Government. (2011b). *Building engagement, building futures: Our strategy to maximise the participation of 16 - 24 year olds in education, training and work*. London: HMSO.

Hobbs, M. & Baker, M. (2012). Hope for recovery: How clinicians may facilitate this in their work. *Journal of Mental Health*, 21 (2), 144-153.



Inhelder, B., & Piaget, J. (1958). The growth of logical thinking. In Coleman, J. (2011).

*The Nature of Adolescence. Fourth Edition.* London: Routledge.

International Positive Psychology Association. (2009). Welcome to the IPPA network online.

Cited in Compton, W. C., & Hoffman, E. (2012). *Positive Psychology: The Science of happiness and flourishing. International Edition.* United Kingdom: Cengage Learning.

Jackson, S. & Goosens, L. (2006). (Eds) *Handbook of adolescent development.*

Hove: Psychology Press Ltd.

Joseph, S. & Wood, A. (2010). Assessment of positive functioning in clinical psychology:

Theoretical and practical issues. *Clinical Psychology Review*, 30, 830-838.

Kennedy, I. (2010). *Getting It Right for Children and Young People: Overcoming cultural*

*barriers in the NHS so as to meet their needs.* [www.dh.gov.uk](http://www.dh.gov.uk)

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005).

Lifetime prevalence and age of onset distributions of DSM-IV disorders in the

National Comorbidity Survey Replication. *Archive of General Psychiatry*, 62,

593-602.

Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2011). The development and validation of a general measure of well-being: the BBC well-being scale.

*Quality of Life Research*, 20, 1035-1042.

King, L. A., Hicks, J.A., Krull, J., Del Gaiso, A. K. (2006). Positive affect and the experience of meaning in life. *Journal of Personality and Social Psychology*, 90, 179-196.

Kirshman, K., Johnson, R., Bender, J., & Roberts, M. (2009). Positive psychology for children and adolescents: Development, preventions, and promotion. In Compton, W. C., & Hoffman, E. (2012). *Positive Psychology: The Science of happiness and flourishing. International Edition*. United Kingdom: Cengage Learning.

Larson, R., Moneta, G., Richards, M., & Wilson, S. (2002). Continuity, stability, and change in daily emotional experience across adolescence. *Child Development*, 73, 1151-1165.

Layard, R. (2010). Measuring subjective well-being. *Science*, 327, 534-535.

Layard, R. (2011). Wellbeing and public policy. *CentrePiece*, Winter.

Layard, R., Clark, D., Knapp, M., & Mayraz, G. (2007). Cost-benefit analysis of psychological therapy. *National Institute Economic Review*, 202, 90-98.

Lazarus, R. S. (2003). Does the positive psychology movement have legs?

*Psychological Inquiry*, 14, 93-109.

Lerner (2009). The positive youth development perspective: Theoretical and empirical bases of a strengths-based approach to adolescent development. In Compton, W. C., &

Hoffman, E. (2012). *Positive Psychology: The Science of happiness and flourishing.*

*International Edition*. United Kingdom: Cengage Learning.

Lopez, S., & Snyder, C. (2009). *Oxford handbook of positive psychology. Second Edition.*

New York: Oxford.

Luthar, S. (2003). (Ed.) *Resilience and vulnerability*. Cambridge: Cambridge University Press.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543-562.

Luthar, S. & Zelazo, L. (2003). Research on resilience: An integrative view. In Luthar, S.

(2003). (Ed.) *Resilience and vulnerability*. Cambridge: Cambridge University Press.

Lyne, K. J., Barrett, P., Evans, C., & Barkham, M. (2006). Dimensions of variation on the

CORE-OM. *British Journal of Clinical Psychology*, 45, 185-203.

- Maniaci, M. R., & Reis, H. T. (2010). The marriage of positive psychology and relationship science: A reply to Fincham and Beach. *Journal of Family Theory and Review*, 2, 47-53.
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, 19, 921- 930.
- Masten, A., Cutuli, J., Herbers, J., & Reed, M-G. (2009). Resilience in development. In Compton, W. C., & Hoffman, E. (2012). *Positive Psychology: The Science of happiness and flourishing. International Edition*. United Kingdom: Cengage Learning.
- Masten, A. S., & Powell, J. L. (2003). A resilience framework for research, policy, and practice. In Luthar, S. (2003). (Ed.) *Resilience and vulnerability*. Cambridge: Cambridge University Press.
- Masten, A. S., & Tellegen, A. (2012). Resilience in developmental psychopathology: Contributions of the Project Competence Longitudinal Study. *Development and Psychopathology*, 24, 345-361.
- McGorry, P. (2011). The mental health of young people: A new frontier in the health and social policy of the 21<sup>st</sup> century. *Early Intervention in Psychiatry*, 5 (1), 1-3.

McGorry, P. D., Killackey, E., & Yung, A. (2008). Early interventions in psychosis:

Concepts, evidence and future directions. *World Psychiatry*, 7, 148-156.

McManus, S., Meltzer, H., Brugha, T., Bebbington, P., & Jenkins, R. (2009). *Adult Psychiatric*

*Morbidity in England, 2007: Results of a household survey*. London: NHS

Information Centre for Health and Social Care.

McNulty, J. K., & Fincham, F. D. (2012). Beyond positive psychology? Toward a contextual

view of psychological processes and well-being. *American Psychologist*, 67 (2),

101-110.

Mental Health Foundation. (1999). *Bright futures: Promoting children and young people's*

*mental health*. London: Mental Health Foundation.

Mental Health Foundation. (2006). *The truth about self-harm...for young people and their*

*friends and families*. London: Mental Health Foundation.

Myers, R. (1990). *Classical and modern regression with applications*. In Field, A. (2009).

*Discovering statistics using SPSS for Windows. Third Edition*. London: Sage.

Office for National Statistics. (2010). In Hendry, L. B. & Kloep, M. (2012). *Adolescence and adulthood: Transitions and transformations*. Hampshire: Palgrave Macmillan.

Office for National Statistics. (2011). *Labour Force Survey*. [www.statistics.gov.uk](http://www.statistics.gov.uk)

Ollson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: a concept analysis. *Journal of Adolescence*, 26, 1-11.

Pallant, J. (2006). *SPSS Survival Manual. Second Edition*. Berkshire: Open University Press.

Park, N. (2004). Character strengths and positive youth development. *The Annals of the American Academy of Political and Social Science*, 591, 40-54.

Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence*, 29, 891-905.

Park, N., Peterson, C., & Seligman, M. E. P. (2004a). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23, 603-619.

Park, N., Peterson, C., & Seligman, M. E. P. (2004b). Strengths of character and well-being. A closer look at hope and modesty. *Journal of Social and Clinical Psychology*, 23,

628-634.

Peterson, C., Ruch, W., Beerman, U., Park, N. & Seligman, M. E. P. (2007). Strengths of character, orientation to happiness, and life satisfaction.

*The Journal of Positive Psychology*, 2, 149-156.

Prince-Embury, S. (2007). *Resiliency Scales for Children and Adolescents:*

*Profiles of personal strengths*. Minneapolis: Pearson.

Prince-Embury, S. (2008). The Resiliency Scales for Children and Adolescents, psychological symptoms and clinical status in adolescents.

*Canadian journal of School Psychology*, 23, 41-56.

Prince-Embury, S. (2010). Psychometric properties of the Resiliency Scales for Children and Adolescents and use for youth with psychiatric disorders.

*Journal of Psychoeducational Assessment*, 28 (4), 291-302.

Prince-Embury, S. & Courville, T. (2008). Comparison of one, two, and three factor models of personal resiliency using the Resiliency Scales for Children and Adolescents.

*Canadian journal of School Psychology*, 23, 11-25.

Prince-Embury, S., & Steer, R. A. (2010). Profiles of personal resiliency for normative and clinical samples of youth assessed by the Resiliency Scales for Children and Adolescents. *Journal of Psychoeducational Assessment*, 28 (4), 303-314.

Pring, M., & Hayward, G. (2009). *Education for all: The future of education and training for 14-19 year olds*. London: Routledge.

Rand, K., & Cheavens. J. (2009). Hope Theory. In Carr, A. (2011). *Positive Psychology: The Science of Happiness and Human Strengths. Second Edition*. Hove: Brunner-Routledge.

Reid, K., Flowers,P., & Larkin, M. (2005). Exploring lived experience. *The Psychologist*, 18 (1), 20-23.

Royal College of Psychiatrists. (2012). *Self harm*. Retrieved from website:

[www.rcpsych.ac.uk/mentalhealthinfo/problems](http://www.rcpsych.ac.uk/mentalhealthinfo/problems) June 2012.

Rutter, M. (1985).Resilience in the face of adversity: Protective factors and resistance to psychiatric disorders. *British Journal of Psychiatry*, 147, 58-611.



Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review on research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.

Sapienza, J. K., & Masten, A. S. (2011). Understanding and promoting resilience in children and youth. *Current Opinion in Psychiatry*, 24, 267-273.

Scioli, A. (2007) *Hope and Spirituality in the Age of Anxiety*. In R. J. Estes (Ed.), *Advancing Quality of Life in a Turbulent World*. New York: Springer.

Scioli, A. (2010). *The Comprehensive Hope Scales- Trait Version*. In Scioli, A., & Biller, H. B. (2010). *The Power of Hope: Overcoming Your Most Daunting Life Difficulties- No Matter What*. Florida: Health Communications, Inc.

Scioli, A., & Biller, H. B. (2009). *Hope in the Age of Anxiety: A Guide to Understanding and Strengthening Our Most Important Virtue*. Oxford: Oxford University Press.

Scioli, A., MacNeill, S., Partridge, V., Tinker, E., & Hawkins, E. (2012). Hope, HIV and health: A prospective study. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, 24 (2), 149-156.

Scioli, A., Ricci, M., Nyugen, T., & Scioli, E. R. (2011). Hope: Its nature and measurement.

*Psychology of Religion and Spirituality*, 3 (2), 78-97.

Seligman, M. E. P. (2002). *Authentic Happiness*. New York: Free Press.

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press.

Seligman, M. E. P. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction.

*American Psychology*, 55, 5-14.

Shiner, R. L., & Masten, A. S. (2012). Childhood personality traits as a harbinger of competence and resilience in adulthood. *Development and Psychopathology*, 24, 507-528.

Shorey, H. S., Little, T. D., Snyder, C. R., Kluck, B., & Robitschek, C. (2007).

Hope and personal growth initiative: A comparison of positive, future-oriented constructs. *Personality and Individual Differences*, 43, 1917-1926.

Sinclair, A., Barkham, M., Evans, C., Connell, J., & Audin, K. (2005).

Rationale and development of a general population well-being measure:

Psychometric status of the GP-CORE in a student sample.

*British Journal of Guidance and Counselling*, 33 (2), 153-173.

Smith, J. A. (1996). Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology and Health*, 11, 261-271.

Snyder, C. (2000). *Handbook of Hope*. Florida: Academic Press.

Snyder, C. R. (2002). Hope Theory: Rainbows in the mind. *Psychological Inquiry*, 13, 249-275.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C. & Harney, P. (1991). The will and ways: Development and validation of an individual-difference measure of hope. *Journal of Personality and Social Psychology*, 60, 570-585.

So, T., & Huppert, F. A. (2009). What percentage of people in Europe are flourishing and what distinguishes them? In Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press.

Statistical Package for Social Sciences (SPSS). Windows version 20.0 (2011).

Chicago: SPSS Inc.

Thomas, J. (2009). *Working paper: Current measures and the challenges of measuring children's well-being*. Newport: Office for National Statistics.

Toner, E., Haslam, N., Robinson, J., & Williams, P. (2012). Character strengths and wellbeing in adolescence: Structure and correlates of the Values in Action Inventory of Strengths for Children. *Personality and Individual Differences*, 52, 637-642.

Ungar, M. & Liebenberg, L. (2011). Assessing resilience across cultures using mixed methods: Construction of the Child and Youth Resilience Measure. *Journal of Mixed Methods Research*, 5 (2), 126-149.

UNICEF Office of Research (2007). Child Poverty in Perspective: An overview of child well-being in rich countries. *Innocenti Report Card 7*. Florence: Innocenti Research Centre.

UNICEF (2011). *Adolescence: The age of opportunity*.  
New York: United Nations Children's Fund.

UNICEF Office of Research (2013). Child Well-being in rich countries: A comparative overview. *Innocenti Report Card, 11*. Florence: UNICEF Office of Research.

Vostanis, P. (2007). Mental health and mental health disorders. In Coleman, J. & Hagel, A. (Eds) (2007). *Adolescence, Risk and Resilience: Against the Odds*. Chichester: John Wiley & Sons Ltd.

Werner, E. E. (1995). Resilience in development. *Current directions in Psychological Science, 4* (3), 81-85.

Young Minds (2005). *Stressed Out and Struggling*. [www.youngminds.org.uk/sos](http://www.youngminds.org.uk/sos).

Youseff, C. M., & Luthans, F. (2007). Positive organisational behaviour in the workplace: The impact of hope, optimism and resilience. *Journal of Management, 33*, 774-800.

## **Appendix I**

Letter of approval from the  
Division of Clinical Psychology



Victoria Charles  
Year One Trainee Clinical Psychologist

D.Clin.Psychology Programme

Division of Clinical Psychology

8<sup>th</sup> July 2010

Dear Vicky

Thank you for submitting your proposal to the Division of Clinical Psychology's Research Committee. Your proposal has been reviewed by 2 readers whose feedback has been provided to the Committee, which was then discussed before reaching a decision.

Based on the review the Committee has decided to approve your proposal without any amendments. One comment that you may wish to consider is that your ethical application should only go to IRAS as they will wish to review the whole study, not just the specifics of the clinical population.

Please ensure that you provide all your supervisors with a copy of this letter.

With best wishes and congratulations,

Simon Duff  
Chair, Year 1 Research Committee

A member of the  
Russell Group

## **Appendix II**

Letter of ethical approval from  
NREC and R and D



Dr James Reilly  
The University of Liverpool

18 August 2011

Dear Dr Reilly

**Study title:** Positive psychological factors in adolescence: The role of resilience and hope in the well-being of young adults  
**REC reference:** 11/NW/0415

Thank you for your letter of 25 July 2011, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

**Confirmation of ethical opinion**

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

**Ethical review of research sites**

**NHS sites**

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

**Non-NHS sites**

**Conditions of the favourable opinion**

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.*

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at

*Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of approvals from host organisations*

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

### **Approved documents**

The final list of documents reviewed and approved by the Committee is as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>	
Covering Letter		10 June 2011	
Covering Letter		18 July 2011	
Evidence of insurance or indemnity	University of Liverpool	25 January 2011	
Investigator CV	Reilly	04 April 2011	
Investigator CV	Charles	15 April 2011	
Letter from Sponsor	Email	12 June 2011	
Other: Available Services Information sheet	1	08 June 2011	
Other: Demographic Information sheet	3	16 June 2011	
Participant Consent Form: Clinical	3	16 July 2011	
Participant Consent Form: Non-Clinical	3	16 July 2011	
Participant Information Sheet: Clinical	4	16 July 2011	
Participant Information Sheet: Non-Clinical	4	16 July 2011	
Protocol	4	08 June 2011	
Questionnaire: CORE-OM			
Questionnaire: Resiliency Scales			
Questionnaire: Hope Scale			
REC application	3.0	10 June 2011	
Response to Request for Further Information	1	25 July 2011	

### **Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

**Department Name**

Direct Line: [REDACTED]

Direct Fax No: [REDACTED]

Email: [REDACTED]

www.[REDACTED]

Main Switchboard [REDACTED]

Dr James Reilly  
The University of Liverpool  
Division of Clinical Psychology

[REDACTED]  
Liverpool  
[REDACTED]

21<sup>st</sup> June 2011

Dear Dr Reilly,

**Re: Positive psychological factors in adolescence**

Thank you for submitting the above application to the Research & Development Office. It has now been reviewed against the requirements of the Research Governance Framework for Health and Social Care and relevant legislation. I am pleased to confirm approval for it to go ahead within [REDACTED] NHS Foundation Trust, once Research Ethics approval has been obtained.

It will be the responsibility of the local Principal Investigator to comply with the responsibilities laid down, in the Research Governance Framework for Health and Social Care, by the Department of Health and with the Medicines for Human Use (Clinical Trials) Regulations 2004. Please see the enclosed leaflet for further information.

A full copy of the Research Governance Framework for Health and Social Care can also be obtained from the Department of Health website at [www.doh.gov.uk](http://www.doh.gov.uk), the R&D Office, or the [REDACTED] NHS Trust Intranet.

Yours sincerely,

*PP* [Signature]  
Dr [REDACTED]  
Chair Research Review Committee

✓ Cc: Vicky Charles



INVESTOR IN PEOPLE

## **Appendix III**

Confirmation of approval to recruit from  
college

**RE: CAMHS 16-18 service**

M [REDACTED] C [REDACTED] [M [REDACTED]@ [REDACTED].AC.UK]

**Sent:** 20 July 2011 10:09

**To:** Charles, Victoria

Hi Vicky,

I have been given the go-ahead to arrange this with you.

I was wondering if we might involve our AS/A2 students as it might be a valuable methodological experience for them? If not though not a problem.

Perhaps we can meet to talk about how/what you need us to do for you. Can you suggest a timescale for this as I am due to take my annual leave shortly

M [REDACTED]

**From:** Charles, Victoria [mailto:V.A.Charles@liverpool.ac.uk]

**Sent:** 15 July 2011 15:01

**To:** M [REDACTED]

**Subject:** RE: CAMHS 16-18 service

Dear M [REDACTED],

Please find attached the three questionnaires for the study (CORE-OM, Hope Scale and Resiliency Scales for Children and Adolescents) and the participant information sheet (images 1-5 are scanned pages of the Resiliency Scales). There is also a demographic sheet that we will ask young people to complete and an information sheet about appropriate services available if they would like to talk to someone about their feelings. I would hope to attend the college and ask young people to take part and would ask them to complete a consent form.

Please let me know if you require and further information and I would be happy to come into college to discuss the study further.

Many thanks and look forward to hearing from you soon,

Best wishes

Vicky

**From:** M [REDACTED] C [REDACTED] [M [REDACTED]@ [REDACTED].AC.UK]

**Sent:** 14 July 2011 15:56

**To:** Charles, Victoria

**Subject:** RE: CAMHS 16-18 service

Hi Vicky

Yes I am the link person and am happy to take your request to our relevant director. She is currently on holiday and so would not be available to give us a definite answer for some time but I am sure she would be favourable if the questionnaire is acceptable to the college. It would be useful if we could have a copy when you are ready to look over please. I too am due to go on vacation shortly so please do not worry if we do not respond to you speedily.. it is just that time of year!

We do get a bit inundated with outside agencies asking for support with questionnaire surveys but yours comes at a good time to arrange. When would you need it done by and what sort of numbers are we looking at?

Please send good wishes to [REDACTED] for me, it is a while since we have spoken.

Best wishes

M [REDACTED]

**From:** Charles, Victoria [mailto:V.A.Charles@liverpool.ac.uk]

**Sent:** 14 July 2011 15:19

**To:** M [REDACTED]

**Cc:** [REDACTED]@[REDACTED].nhs.uk

**Subject:** CAMHS 16-18 service

Hello,

I am a Trainee Clinical Psychologist from the University of Liverpool and as part of my training, I am conducting a research project with Dr [REDACTED] Clinical Psychologist, of the CAMHS 16-18 service in [REDACTED]. I understand from [REDACTED] that you act as a link person between the service and [REDACTED] College and [REDACTED] suggested that I contact you.

We are really interested in learning more about young people's strengths and resilience and will be asking young people who are accessing the 16-18 team to fill in some questionnaires about their feelings in relation to hope and well-being. We would also like to ask young people (aged 16-18) who are attending colleges in the [REDACTED] area to fill in the questionnaires so that we can also gather information about their thoughts and feelings and make some comparisons. It is hoped that this research will help us to think about developing interventions that enhance young peoples' resilience and increase their well-being.

We would really like to recruit young people from [REDACTED] into our study and I wonder if it would be possible for you to advise who to speak to at [REDACTED] regarding this. I am currently in the process of securing ethical approval from NHS Research and Development Department and the National Research Ethics Committee and am just awaiting final approval.

Please let me know if you require further information/documentation regarding the study.

Many thanks and I hope to hear from you soon,

Best wishes,

Vicky Charles  
Trainee Clinical Psychologist  
the University of Liverpool

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## **Appendix IV**

### **Participant Information Sheet**



## **Participant Information Sheet**

### **Title:**

**Positive factors in adolescence: The role of resilience and hope in the wellbeing of young adults.**

**You are being invited to take part in a research study. Before you decide whether to take part it is important for you to understand why the research is being carried out and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask us if there is anything that is not clear or that you would like more information about. Take some time to decide whether or not you wish to take part. Thank you for reading this.**

### **Who is organising and funding the research?**

The study is being carried out as part of the Doctorate in Clinical Psychology programme at the University of Liverpool, and the University are providing the funding.

The research team includes Vicky Charles, Trainee Clinical Psychologist, Dr James Reilly, Clinical Psychologist, The University of Liverpool, Dr , Clinical Psychologist. Insurance will be provided by the NHS indemnity scheme and the University of Liverpool professional indemnity and clinical trials insurance.

### **Why is the study being done?**

Adolescence can be a difficult time and many young people face a range of stressful life events. We are interested in learning more about the personal strengths and resources that adolescents use to help them cope with these challenges. It is hoped that improving our understanding of young people's experiences may help us to develop effective therapies.

### **Why have I been asked to take part?**

We are inviting you to participate because you are aged 16-18 years and attend college in the area.



We aim to recruit a total of 77 young people who attend college in X and also 77 young people who have been referred to the 16-18 Team of the Child and Adolescent Mental Health service.

### **Do I have to take part?**

No, you decide whether or not you wish to take part in the study. If you decide you would like to participate you will be asked to sign a consent form.

### **What will happen if I take part?**

You will be asked by a member of the research team, Vicky Charles, Trainee Clinical Psychologist, to complete an information sheet and 3 brief questionnaires about how people think, feel and behave. Your responses will be anonymous and confidential. You will be asked to circle the response that is most suited to yourself and no writing is involved when filling in the questionnaires. It is expected to take around 30 minutes to complete them.

The researcher will direct you to a quiet room where you will fill in the questionnaires without anyone else present. You will be asked to return the completed forms to the researcher in a sealed envelope.

### **What are the advantages of taking part?**

**Participants in the study are invited to take part in a prize draw where the first prize is £50 of high street vouchers, the second prize is £25 of high street vouchers and the third prize is £10 of high street vouchers. We will need your name and telephone number if you decide to take part in the prize draw, so that we can contact you if you win.**

### **Are there any risks or benefits involved in taking part?**

We have not identified any risks in taking part in the study. Most of the questions are quite general but there are a few that may feel a bit personal. If you feel upset after filling in the questionnaires please speak to the researcher. You will also be given an information sheet about services you can contact if you feel that you need someone to talk to or you would like some advice. The contact details of the Research Team are also included in this Participant Information sheet.

We have not identified any immediate benefits in taking part in the study.

### **What if there is a problem?**

If there is a problem please contact the Chief Investigator, Dr James Reilly, at The University of Liverpool, telephone, email, and we will try to help.

If you remain unhappy or have a complaint which you feel unable to speak to us about then please contact the Research Governance Officer on 0151 (email) When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researcher(s) involved and the details of the complaint you wish to make.

### **Will my participation be confidential?**

If you agree to take part in the study, any information you give the researcher will be kept strictly confidential and will conform to the Data Protection Act of 1998 with respect to data collection, storage and destruction. Your name will not appear on any of the forms, you will be assigned a study number instead. All information about your identity will be stored separately from data gathered during the study. All data will be stored securely on an NHS site and then will be destroyed after five years. This is following recommendation from the Medical Research Council. Any information you give to the researcher will not be shared with anyone outside of the research team without your consent, unless the researcher feels that either yourself or others are likely to be harmed.

### **What will happen if I don't want to continue with the study?**

You have the right to withdraw from the study at any time without giving a reason. If you decide to withdraw your information would be taken out of the study and destroyed in accordance with the Data Protection Act of 1998.

### **What will happen to the results of the study?**

The anonymised data gathered will be analysed, written up and submitted as a Doctoral thesis to the University of Liverpool. Participants will not be identifiable from the data. The results of the study will be presented in poster form and will be displayed in the 16-18 Teams and local colleges in the area. We do not expect the results to be available until the end of 2012.

It is intended that the study will be written up and submitted to a scientific journal for publication.

**Who has reviewed the study?**

All research in the NHS is looked at by an independent party called a Research Ethics Committee in order to protect your safety, rights, well-being and dignity.

**Criminal Records Bureau Check**

The researchers involved in the study have obtained CRB disclosure and participants may request evidence of the Disclosure from the Chief Investigator, Dr James Reilly.

**Who can I contact if I have any further questions?**

Please contact Vicky Charles,	or Dr James Reilly
Trainee Clinical Psychologist,	Senior University Clinical Teacher
The University of Liverpool,	The University of Liverpool
Telephone 0151	Telephone 0151
Email	Email

**Thank you for taking the time to read this information sheet.**

## **Appendix V**

### Research measures

### Demographic Information

**Participant Identification Number:**

Age:

Gender: Male/Female

Ethnicity:

Do you attend college? Yes/No

What are your living arrangements?

With parents ☐ With other family ☐ On own / independently ☐ With friends ☐In the care of the local authority ☐Other (please specify) ☐

Do you have any children? Yes/No

Have you previously been referred to mental health services? (within or outside of the NHS, and whether or not you actually attended appointments)

No ☐ Yes: ☐ Please tick any below that apply☐ Currently attending appointments☐ Previously attended appointments☐ Referred and on waiting list for an appointment☐ Referred and offered appointment but declined

Have you ever been admitted to hospital because of mental health issues? Yes/No

Do you feel that you need to see someone and would like to be referred to mental health services?      Yes/No

(The attached information sheet provides advice regarding who to contact if you feel that you or someone you know would benefit from talking to someone about mental health issues. Please detach the sheet and take it with you).

*Thank you for taking the time to complete this form.*

## **Appendix V- Research Measures**

### **Third party copyrighted material**

The CORE-OM is available by request from the CORE Information Management System (IMS) [www.coreims.co.uk](http://www.coreims.co.uk)

Prince-Embury, S. (2007). *Resiliency Scales for Children and Adolescents: Profiles of personal strengths*. Minneapolis: Pearson.

Scioli, A. (2010). *The Comprehensive Hope Scales- Trait Version*. In Scioli, A., & Biller, H. B. (2010). *The Power of Hope: Overcoming Your Most Daunting Life Difficulties- No Matter What*. Florida: Health Communications, Inc.

## **Appendix VI**

Information sheet regarding  
available services





### **Information Sheet regarding Available Services**

If you feel that you, or a friend or family member, would benefit from talking to someone about their problems then here is a list of useful advice and contacts.

If somebody is experiencing an emotional crisis and feels at risk of hurting themselves, or someone else, then they are advised to attend their local Accident and Emergency Department as soon as possible.

If you or somebody you know would like to be referred to Mental Health Services then please make an appointment with your GP to discuss this further.

If you would like some general advice regarding mental health problems then please contact NHS Direct in confidence on 0845 4647.

Other useful national contact details for services offering confidential emotional support include:

The Samaritans 08457 90 90 90 or email [jo@samaritans.org](mailto:jo@samaritans.org)

MIND [www.mind.org.uk](http://www.mind.org.uk)

Young Minds [www.youngminds.org.uk](http://www.youngminds.org.uk)

Anxiety UK 08444 775 774 (helpline open Monday to Friday, 9.30 am to 5.30pm) [www.anxietyuk.org.uk](http://www.anxietyuk.org.uk)

B-eat (information regarding eating disorders) b-eat youthline 0845 634 7650  
[fyp@b-eat.co.uk](mailto:fyp@b-eat.co.uk)

## **Appendix VII**

Poster to advertise study  
designed by college students

# **Would you like to take** **part in a real** **Psychology study ?**

We have been asked to take part in some research by the University of Liverpool and we need **students** who **attend college** in the area **age 16-18**.

## **What will you be asked to do?**

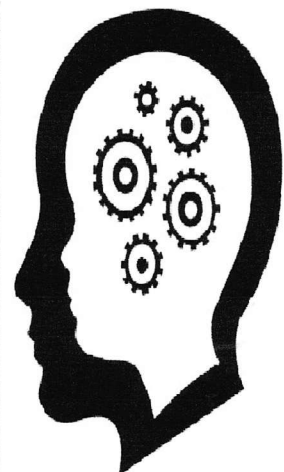
You will be asked to complete an information sheet and 3 short questionnaires which in total will take approximately 20 minutes. All responses will be **anonymous** and kept **confidential**

We have identified no risks in the study and your information will be kept confidential. You will have the right to withdraw from the study at any time.

**To Take Part...**  
**Date/Time/**  
**Location**

## **Will I benefit from the study?**

You will be helping research into improving the understanding into young peoples stressful experiences. You will also be invited into a prize draw where you can win up to £50 in high street vouchers. *We will need your name and telephone number if you choose to participate in the prize draw.*



## **Appendix VIII**

Letter of NREC approval  
regarding amendment

## NRES Committee North West -

Victoria Charles for Dr James Reilly  
Trainee Clinical Psychologist  
The University of Liverpool

05 January 2012

Dear Miss Charles

**Study title:** Positive psychological factors in adolescence: The role of resilience and hope in the well-being of young adults  
**REC reference:** 11/NW/0415  
**Amendment number:** 1  
**Amendment date:** 21 December 2011

The above amendment was reviewed by the Sub-Committee in correspondence.

- To add documents developed by service users to the study

### Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

### Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Poster - Non-Clinical	1	12 December 2011
Poster - Clinical	1	12 December 2011
Participant Consent Form: Prize draw	3	12 December 2011
Notice of Substantial Amendment (non-CTIMPs)	1	21 December 2011
Covering Letter	Email	21 December 2011

### Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

## **Appendix IX**

Consent form

## CONSENT FORM

**Title of Research Project:** Positive psychological factors in adolescence: The role of resilience and hope in the well-being of young adults

**Researcher(s):** Victoria Charles (Trainee Clinical Psychologist)  
Dr James Reilly (The University of Liverpool)

**Please  
initial box**

1. I confirm that I have read and have understood the information sheet dated [16/07/2011] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. ☐
3. I understand that, under the Data Protection Act, I can at any time ask for access to the information I provide and I can also request the destruction of that information if I wish. ☐
4. I agree to take part in the above study. ☐

\_\_\_\_\_  
Participant Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of Person taking consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**The contact details of lead Researcher (Principal Investigator) are:**

Dr James Reilly, Senior University Clinical Teacher,  
Doctorate in Clinical Psychology course,  
The University of Liverpool,  
Telephone:  
Email:

## **Appendix X**

Prize draw consent sheet



# Positive psychological factors in adolescence

## Prize Draw

Win high street  
vouchers!

1<sup>st</sup> Prize = £50

2<sup>nd</sup> Prize = £25

3<sup>rd</sup> Prize = £10



.....

I would like to enter the prize draw

Name

Contact phone number



## **Appendix XI**

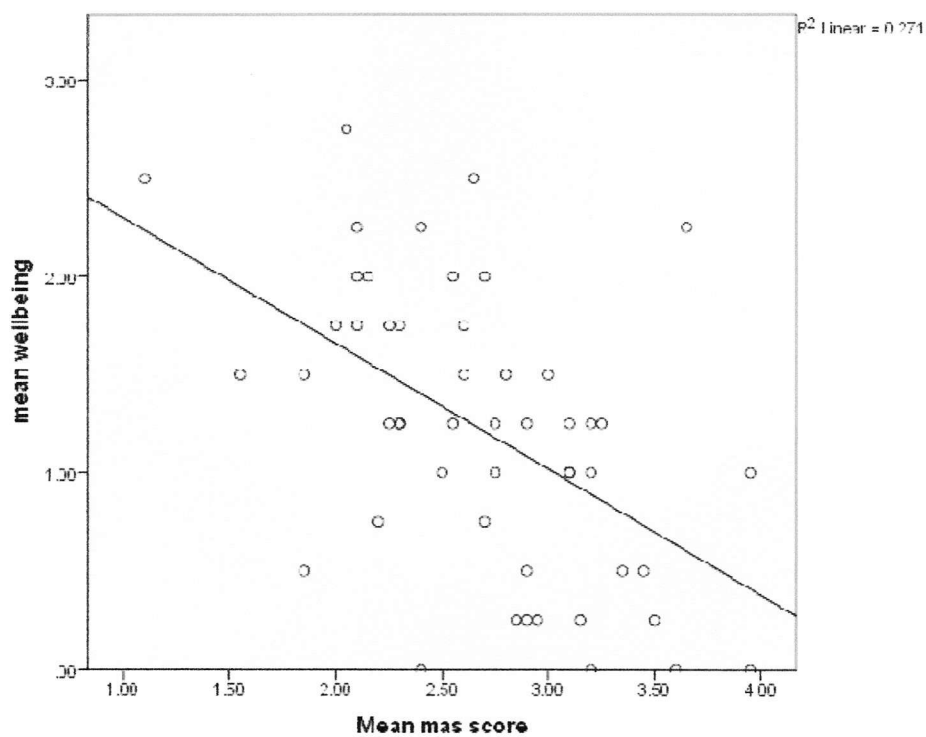
Figures 1-4: Scatterplots

## Appendix XI

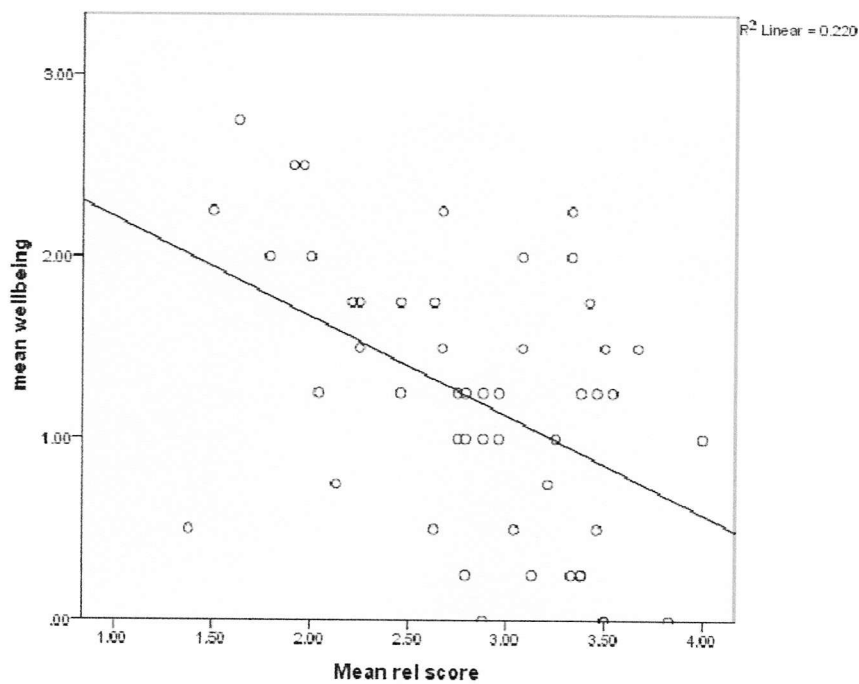
### Scatterplots

Simple scatterplots were generated initially to enable exploration of possible violations of the assumptions of linearity and homoscedasticity (Pallant, 2006) and to identify the nature of potential relationships between the variables.

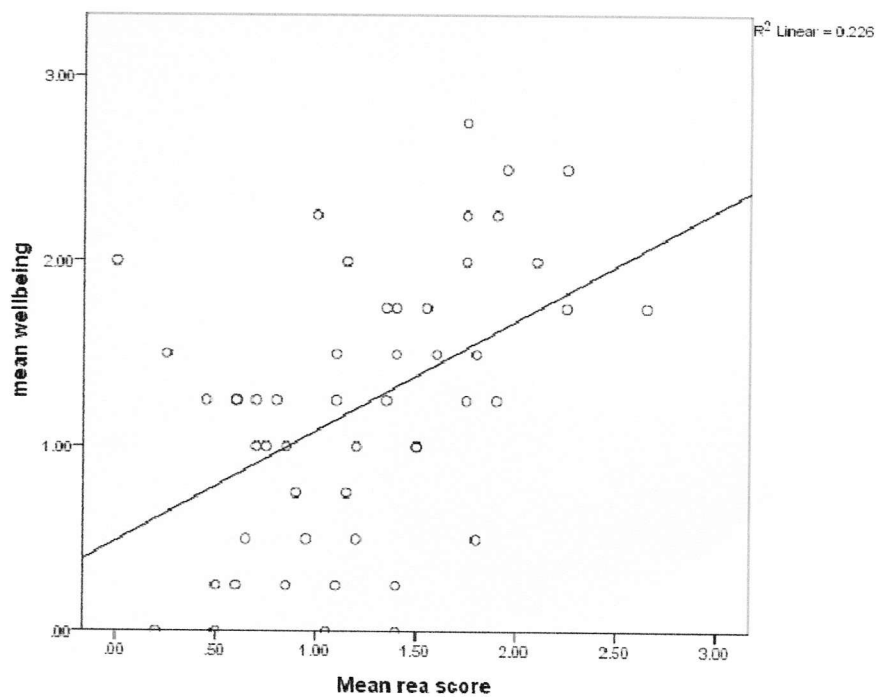
**Figure 1:** Scatterplot to show the association between total mean scores on the Well-being dimension and the Mastery Scale



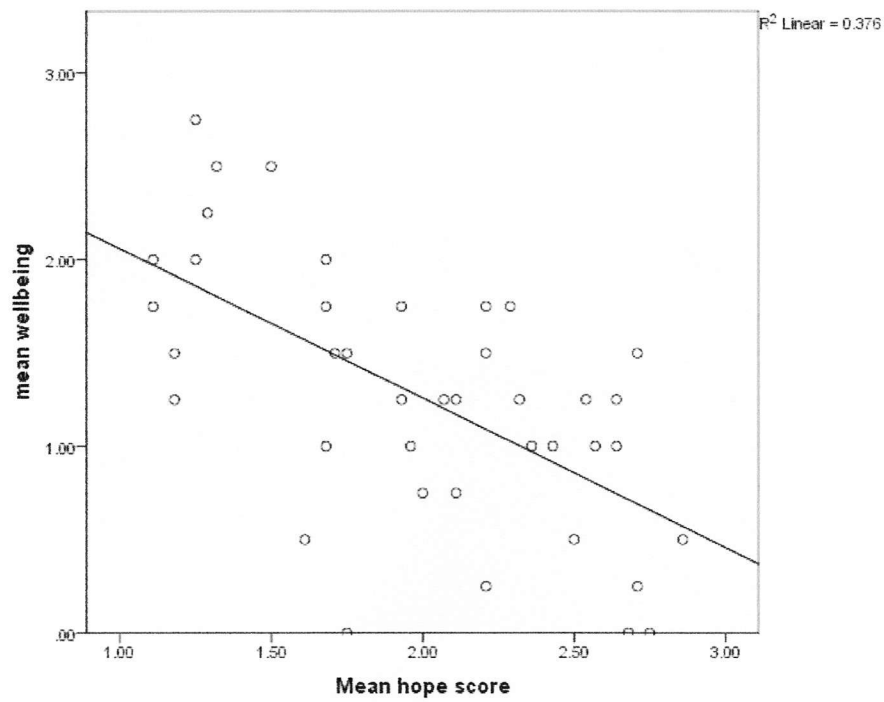
**Figure 2:** Scatterplot to show the relationship between total mean scores on the Well-being dimension and the Relatedness scale



**Figure 3:** Scatterplot to show the relationship between total mean scores on the Well-being dimension and the Reactivity scale



dimension and the Hope scale

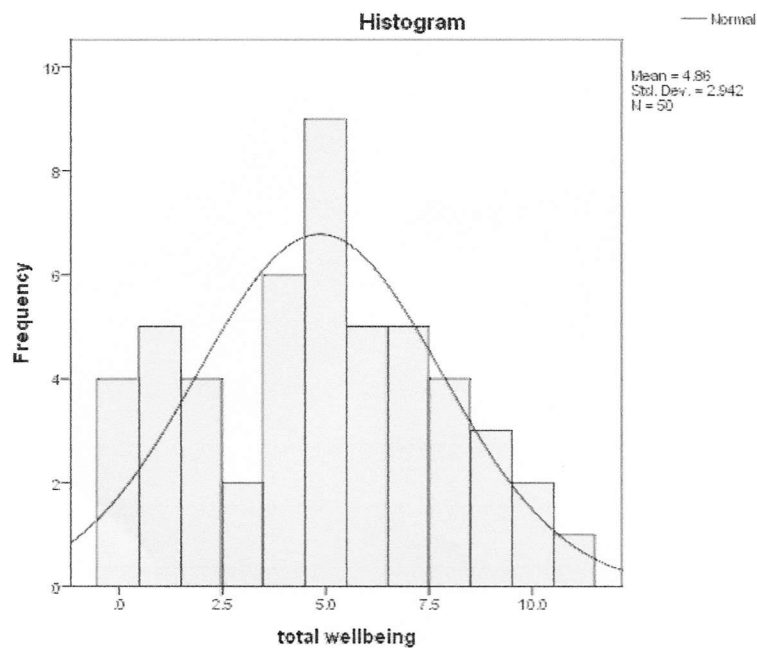


## **Appendix XII**

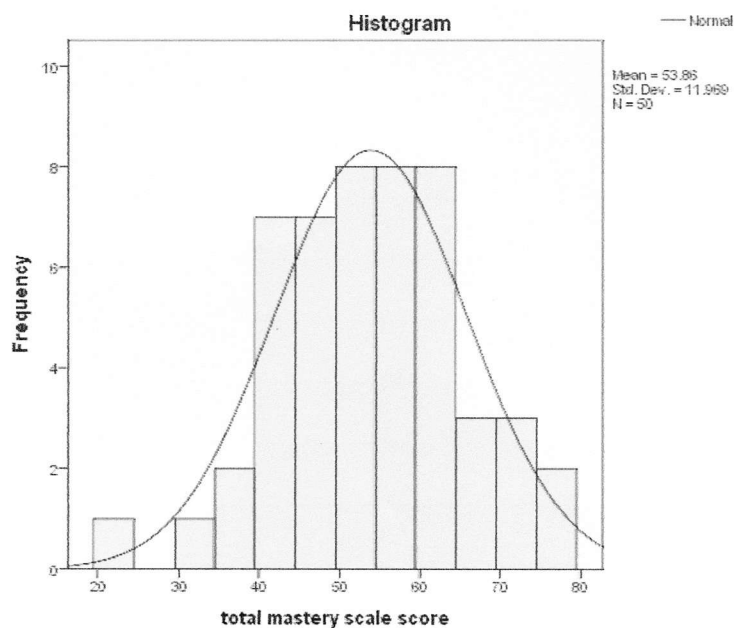
Figures 5-9: Histograms

**Appendix XII Histograms to show the distribution of the total mean scores for each measure**

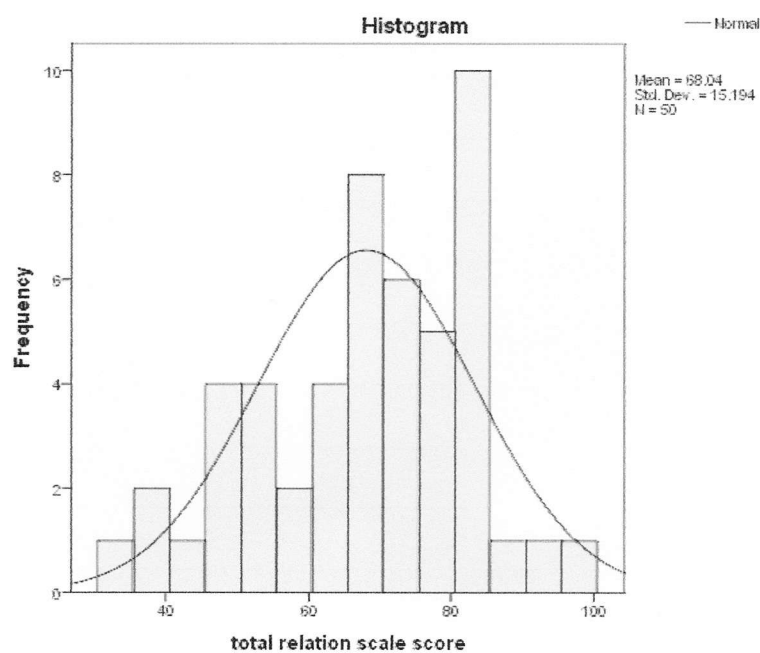
**Figure 5:** Histogram to show the distribution of total mean scores on the Well-being dimension of the CORE-OM



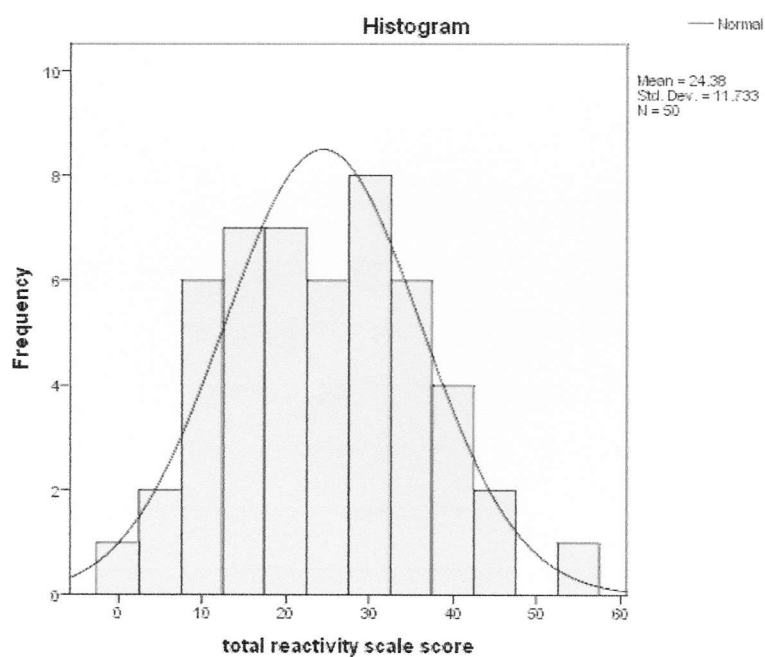
**Figure 6:** Histogram to show the distribution of total mean scores on the Mastery Scale



**Figure 7:** Histogram to show the distribution of total mean scores on the Relatedness Scale

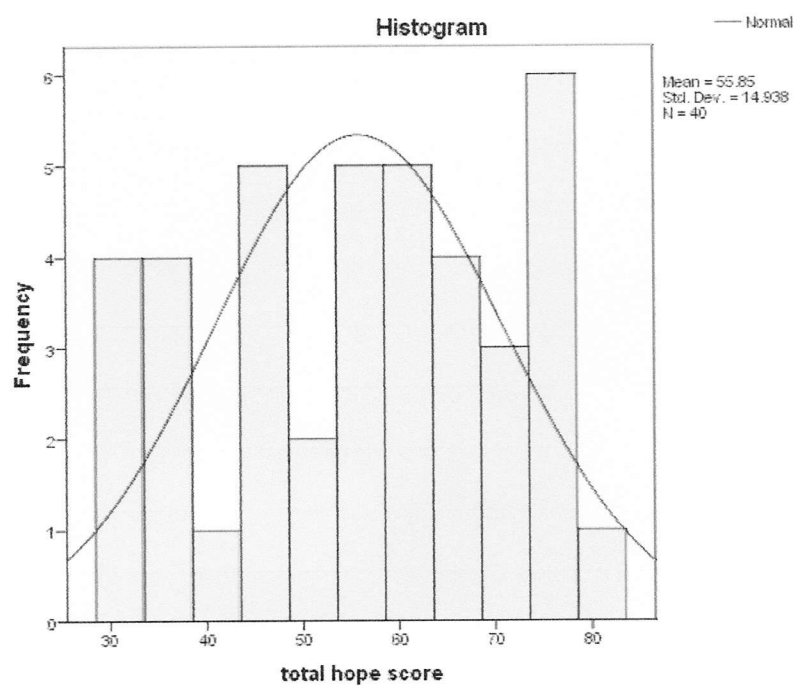


**Figure 8:** Histogram to show the distribution of total mean scores on the Reactivity Scale





**Figure 9:** Histogram to show the distribution of total mean scores on the Comprehensive Hope Scale-Trait Version



## **Appendix XIII**

### **Table 8: Skewness and kurtosis**

**Appendix XIII.**

**Table 8: Skewness and Kurtosis, converted to Z-scores**

<b>Measure</b>	<b>Skewness z scores</b>	<b>Kurtosis z scores</b>
<b>CORE-OM</b>		
Well-being dimension	.10	-1.18
<b>Resiliency Scales</b>		
Mastery Scale	-.26	.10
Relatedness Scale	-1.48	-.73
Reactivity Scale	.46	-.63
<b>Comprehensive Hope Scale</b>		
Trait hope	-.43	-1.58

As shown in Table 8, none of the skewness and kurtosis z scores  $>1.96$  or  $>-1.96$  (Field, 2005) and therefore the data for each of these scales appears to be normally distributed.

## **Appendix XIV**

Protocol for recruitment from  
clinical service

Positive psychological factors in adolescence:

The role of resilience and hope in the well-being of young adults

Vicky Charles, Trainee Clinical Psychologist,

The University of Liverpool

Procedure:

- All new referrals to the 16-18 service will be invited to participate in the research
- A copy of the participant information sheet to be sent with their first appointment letter for the service
- Participants will be given a **minimum of 24 hours** to consider whether or not they wish to participate or in session
- Within a maximum of the first **three clinical sessions**, and using clinical judgement, the clinician will invite their client (at the end of session) to participate in the research
- If the client consents the clinician will ask them to read and sign a consent form.
- One copy of the consent form to be given to the client and one to be retained for the researcher but to be kept separately from the measures.
- The consent form and participant information sheet clearly lay out the person's right to say no and that their care will not be affected
- When a young person consents they will be left alone in the clinic room to complete the study questionnaires and will be asked to put the completed questionnaires in an envelope and seal it and return it to the clinician
- Clinician to photocopy **anonymous** copy of completed CORE service questionnaire and place it in sealed envelope and attach it to envelope with completed questionnaires relevant to their client
- The questionnaires should take approximately 20-30 minutes to complete and once they have been completed the client will not be required to do anything further in the study
- All participants will be given an information sheet signposting them to appropriate statutory and non-statutory services should they experience distress
- There are items in the questionnaires that relate to self harm and other personal issues
- It is anticipated that Clinicians will address any risk issues in sessions with clients as part of their usual clinical practice
- **Using the Record Sheet provided, please will each clinician record the number of individuals who have been approached, and the number who have consented and who have declined. Please make a note if anyone decides to withdraw their consent at a later date.**

Prize draw

- The young people who consent to take part are invited to put their name into a prize draw for high street vouchers (first prize is £50, second prize is £25 and third prize is £10).

- **Participants wishing to participate in the prize draw will be required to consent to writing their name and contact details on the prize draw sheet which will be placed in a sealed box at the 16-18 service and stored separately from the research data.**

#### **Other key points:**

Where it is the clinical judgement of the person recruiting participants to the study that it is not appropriate to invite a young person to take part as this could potentially damage a therapeutic relationship or cause distress, the young person will not be invited to participate.

GPs will not be notified of participation in study.

There is not an exclusion criteria. However, in order to maintain confidentiality and standardised protocol participants will be required to complete the measures independently. Therefore it is not possible to provide translators and interpreters. Potential participants will be informed of this and asked to decide whether or not they would like to participate.

All participants will be provided with the researcher's contact details and risks will be discussed and managed *within supervision* by the research and clinical team.

Participants will be allocated a Participant identification number and thus data gathered will be anonymised. Therefore the research team will not have access to clinical notes or personal information.

#### **Data Storage**

Hard copies of completed anonymised research measures will be stored securely and in line with the Data Protection Act and NHS Foundation Trust policy by the Data Custodian, Dr, at the 16-18 Adolescent Mental Health Service.

The questionnaires will be stored in a locked filing cabinet within a locked room and only the research team will have access to the anonymised data.

#### **Results**

Participants will be invited to contact the researcher if they are interested in the results of the study and the participant information sheet details the procedure and prospective time scale of the availability of the results.

Summary posters of the project will be prepared and displayed at the 16-18 Service and the participating colleges.

***Thank you very much for all of your support with the study***